



#5

SEQUENCE LISTING

<110> Grosse et al

<120> Novel Proteins and Nucleic Acids Encoding Same

<130> 21402-157

<140> 09/976,782

<141> 2001-10-12

<150> 60/240,113

<151> 2000-10-12

<150> 60/240,662

<151> 2000-10-16

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<150> 60/240,669

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<150> 60/262,455

<151> 2001-01-18

<150> 60/240,648

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<160> 127

<170> PatentIn Ver. 2.1

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Asp Val Phe His Val Ala Arg Lys Glu Glu Gln Trp Trp Trp Ala Thr
      35             40             45

Leu Leu Asp Glu Ala Gly Gly Ala Val Ala Gln Gly Tyr Val Pro His
      50             55             60

Asn Tyr Leu Ala Glu Arg Glu Thr Val Glu Ser Glu Pro Trp Phe Phe
      65             70             75             80

Gly Cys Ile Ser Arg Ser Glu Ala Val Arg Arg Leu Gln Ala Glu Gly
      85             90             95

Asn Ala Thr Gly Ala Phe Leu Ile Arg Val Ser Glu Lys Pro Ser Ala
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Asp Tyr Val Leu Ser Val Arg Asp Thr Gln Ala Val Arg His Tyr Lys
      115            120            125

Ile Trp Arg Arg Ala Gly Gly Arg Leu His Leu Asn Glu Ala Val Ser
      130            135            140

Phe Leu Ser Leu Pro Glu Leu Val Asn Tyr His Arg Ala Gln Ser Leu
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Ser His Gly Leu Arg Leu Ala Ala Pro Cys Arg Lys His Glu Pro Glu
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 Leu Cys Arg Lys Leu Gly Ser Gly Tyr Phe Gly Glu Val Phe Glu Gly
 195 200 205
 Leu Trp Lys Asp Arg Val Gln Val Ala Ile Lys Val Ile Ser Arg Asp
 210 215 220
 Asn Leu Leu His Gln Gln Met Leu Gln Ser Glu Ile Gln Ala Met Lys
 225 230 235 240
 Lys Leu Arg His Lys His Ile Leu Ala Leu Tyr Ala Val Val Ser Val
 245 250 255
 Gly Asp Pro Val Tyr Ile Ile Thr Glu Leu Met Ala Lys Gly Ser Leu
 260 265 270
 Leu Glu Leu Leu Arg Asp Ser Asp Glu Lys Val Leu Pro Val Ser Glu
 275 280 285
 Leu Leu Asp Ile Ala Trp Gln Val Ala Glu Gly Met Cys Tyr Leu Glu
 290 295 300
 Ser Gln Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val
 305 310 315 320
 Gly Glu Asn Thr Leu Cys Lys Val Gly Asp Phe Gly Leu Ala Arg Leu
 325 330 335
 Ile Lys Trp Thr Ala Pro Glu Ala Leu Ser Arg Gly His Tyr Ser Thr
 340 345 350
 Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu His Glu Met Phe Ser
 355 360 365
 Arg Gly Gln Val Pro Tyr Pro Gly Met Ser Asn His Glu Ala Phe Leu
 370 375 380
 Arg Val Asp Ala Gly Tyr Arg Met Pro Cys Pro Leu Glu Cys Pro Pro
 385 390 395 400
 Ser Val His Lys Leu Met Leu Thr Cys Trp Cys Arg Asp Pro Glu Gln
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      20             25             30

Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
      35             40             45

Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
      50             55             60

Val Ala Arg Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
      65             70             75             80

Gly Thr Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys
      85             90             95

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Gly Gly Pro Gly Phe Pro Val Cys Pro Ala Gly Gly Ile Gln Glu Val
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 115 120 125
 Glu Ile Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu
 130 135 140
 Asn Asn Lys Phe Ala Ser Phe Ile Glu Gln Val Arg Phe Leu Glu Gln
 145 150 155 160
 Gln Asn Lys Val Leu Glu Thr Lys Trp Ala Leu Leu Gln Glu Gln Gly
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 Gln Asn Leu Gly Val Thr Arg Asn Asn Leu Glu Pro Leu Phe Glu Ala
 180 185 190
 Tyr Leu Gly Ser Met Arg Ser Thr Leu Asp Arg Leu Gln Ser Glu Arg
 195 200 205
 Gly Arg Leu Asp Ser Glu Leu Arg Asn Val Gln Asp Leu Val Glu Asp
 210 215 220
 Phe Lys Asn Lys Tyr Glu Glu Glu Ile Asn Lys Arg Thr Ala Ala Glu
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 Asn Asp Phe Val Val Leu Lys Lys Tyr Glu Thr Glu Leu Ala Met Arg
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 260 265 270
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 Tyr Glu Glu Ile Ala Arg Ser Ser Lys Ala Glu Ala Glu Ala Leu Tyr
 340 345 350
 Gln Thr Lys Val Gln Glu Leu Gln Val Ser Ala Gln Leu His Gly Asp
 355 360 365
 Arg Met Gln Glu Thr Lys Val Gln Ile Ser Gln Leu His Gln Glu Ile
 370 375 380
 Gln Arg Leu Gln Ser Gln Thr Glu Asn Leu Lys Lys Gln Arg Ala Ser
 385 390 395 400

Leu Glu Ala Ala Ile Ala Asp Ala Glu Gln Arg Gly Glu Leu Ala Ile
 405 410 415
 Lys Asp Ala Asn Ala Lys Leu Ser Glu Leu Glu Ala Ala Leu Gln Arg
 420 425 430
 Ala Lys Gln Asp Met Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met
 435 440 445
 Asn Val Lys Leu Ala Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu
 450 455 460
 Leu Glu Gly Glu Glu Ser Arg Met Ser Gly Glu Cys Gln Ser Ala Val
 465 470 475 480
 Ser Ile Ala Val Val Ser Gly Ser Thr Ser Thr Gly Gly Ile Ser Gly
 485 490 495
 Gly Leu Gly Ser Gly Ser Gly Phe Gly Leu Ser Ser Gly Phe Gly Ser
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 <212> PRT
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 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
 50 55 60
 Val Ala Arg Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Thr Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys
 85 90 95
 Gly Gly Pro Gly Phe Pro Val Cys Pro Ala Gly Gly Ile Gln Glu Val
 100 105 110
 Thr Ile Asn Gln Ser Leu Leu Thr Pro Leu His Val Glu Ile Asp Pro
 115 120 125
 Glu Ile Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu
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 Asn Asn Lys Phe Ala Ser Phe Ile Glu Gln Val Arg Phe Leu Glu Gln
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 Gln Asn Lys Val Leu Glu Thr Lys Trp Asn Leu Leu Gln Gln Gln Gly
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 His Ile Asn Tyr Leu Arg Ser Tyr Leu Asp Asn Ile Leu Gly Glu Arg
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 Gly Arg Leu Asp Ser Glu Leu Lys Asn Met Glu Asp Leu Val Glu Asp
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 Phe Lys Lys Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Ala Ala Glu
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Asn Glu Phe Val Thr Leu Lys Lys Asp Val Asp Ser Ala Tyr Met Asn
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 Ala Gln Arg Ser Arg Ala Glu Ala Glu Ala Trp Tyr Gln Thr Lys Val
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 Thr Lys Asn Glu Ile Ala Glu Leu Thr Arg Thr Ile Gln Arg Leu Gln
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 370 375 380
 Ala Ile Ala Glu Ala Glu Gln Arg Gly Glu Leu Ala Leu Lys Asp Ala
 385 390 395 400
 Gln Lys Lys Leu Gly Asp Leu Asp Val Ala Leu His Gln Ala Lys Glu
 405 410 415
 Asp Leu Thr Arg Leu Leu Arg Asp Tyr Gln Glu Leu Met Asn Val Lys
 420 425 430
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 435 440 445
 Gln Glu Ser Arg Met Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ala
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 Val Val Ser Gly Ser Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly
 465 470 475 480
 Ser Gly Ser Gly Phe Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly
 485 490 495
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 <212> DNA
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Cys Asp Ser Ala Ile Val Gly Gly Gly Lys Arg Gly Ala Phe Ser Ser
          20                               25                               30

Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
    35                               40                               45

Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
    50                               55                               60

Val Ala Arg Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
    65                               70                               75                               80

Gly Thr Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys
    85                               90                               95

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 Gln Asn Lys Val Leu Glu Thr Lys Trp His Leu Leu Gln Gln Gln Gly
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 Asp Gln Leu Arg Lys Gln Leu Glu Gln Leu Gln Gly Glu Arg Gly Ala
 195 200 205
 Leu Asp Ala Glu Leu Lys Ala Cys Arg Asp Gln Glu Glu Glu Tyr Lys
 210 215 220
 Ser Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Glu Met Glu Asn Glu
 225 230 235 240
 Phe Val Leu Ile Lys Lys Asp Val Asp Glu Ala Tyr Met Asn Lys Val
 245 250 255
 Glu Leu Glu Ser Arg Leu Glu Gly Leu Thr Asp Glu Ile Asn Phe Leu
 260 265 270
 Arg Gln Leu Tyr Glu Glu Glu Ile Arg Glu Leu Gln Ser Gln Ile Ser
 275 280 285
 Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Met
 290 295 300
 Asp Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Asn
 305 310 315 320
 Arg Ser Arg Ala Glu Ala Glu Ser Met Tyr Gln Ile Lys Tyr Glu Glu
 325 330 335
 Leu Gln Ser Leu Ala Gly Lys His Gly Asp Asp Leu Arg Arg Thr Lys
 340 345 350
 Thr Glu Ile Ser Glu Met Asn Arg Asn Ile Ser Arg Leu Gln Ala Glu
 355 360 365
 Ile Glu Gly Leu Lys Gly Gln Lys Ala Ser Leu Glu Asn Ser Leu Arg
 370 375 380
 Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu Gln Leu Asn Gly Ile
 385 390 395 400

Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr Arg Ala Glu Gly Gln
 405 410 415
 Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn Ile Lys Val Lys Leu
 420 425 430
 Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu Glu Asp Gly Glu Asp
 435 440 445
 Phe Lys Met Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ala Val Val
 450 455 460
 Ser Gly Ser Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly
 465 470 475 480
 Ser Gly Phe Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly
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 <211> 521
 <212> PRT
 <213> Homo sapiens

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 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
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 Val Ala Arg Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Thr Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys
 85 90 95
 Gly Gly Pro Gly Phe Pro Val Cys Pro Ala Gly Gly Ile Gln Glu Val
 100 105 110
 Thr Ile Asn Gln Ser Leu Leu Thr Pro Leu His Val Glu Ile Asp Pro
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 Glu Ile Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu
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 Asn Asn Lys Phe Ala Ser Phe Ile Glu Gln Val Gln Phe Leu Glu Gln
 145 150 155 160
 Gln Asn Lys Val Leu Glu Thr Lys Trp Asn Leu Leu Gln Gln Gln Thr
 165 170 175
 Thr Thr Thr Ser Ser Lys Asn Leu Glu Pro Leu Phe Glu Thr Tyr Leu
 180 185 190
 Ser Val Leu Arg Lys Gln Leu Asp Thr Leu Gly Asn Asp Lys Gly Arg
 195 200 205
 Leu Gln Ser Glu Leu Lys Thr Met Gln Asp Ser Val Glu Asp Phe Lys
 210 215 220
 Thr Lys Tyr Glu Glu Glu Ala His Arg Arg Ala Thr Leu Glu Asn Asp
 225 230 235 240
 Phe Val Val Leu Lys Lys Asp Val Asp Gly Val Phe Leu Ser Lys Met
 245 250 255

Glu Leu Glu Gly Lys Leu Glu Ala Leu Arg Glu Tyr Leu Tyr Phe Leu
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 275 280 285
 Ser Asp Thr Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp
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 Leu Asp Ser Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala
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 Gln Arg Ser Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Val Gln
 325 330 335
 Gln Leu Gln Ile Ser Val Asp Gln His Gly Asp Asn Leu Lys Asn Thr
 340 345 350
 Lys Ser Glu Ile Ala Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala
 355 360 365
 Glu Ile Glu Asn Ile Lys Lys Gln Cys Gln Thr Leu Gln Val Ser Val
 370 375 380
 Ala Asp Ala Glu Gln Arg Gly Glu Asn Ala Leu Lys Asp Ala His Ser
 385 390 395 400
 Lys Arg Val Glu Leu Glu Ala Ala Leu Gln Gln Ala Lys Glu Glu Leu
 405 410 415
 Ala Arg Met Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala
 420 425 430
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 435 440 445
 Tyr Arg Met Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ala Val Val
 450 455 460
 Ser Gly Ser Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly
 465 470 475 480
 Ser Gly Phe Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly
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 Phe Gly Phe Gly Gly Ser Val Ser Gly Ser Ser Ser Ser Lys Ile Ile
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 Ser Thr Thr Thr Leu Asn Lys Arg Arg
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<210> 11
 <211> 1113
 <212> DNA
 <213> Homo sapiens

<400> 11

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<210> 12

<211> 349

<212> PRT

<213> Homo sapiens

<400> 12

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Met Pro Ala Ala Ser Ala Ser Ser Pro Gly Ile Glu His Leu Thr Cys
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          20          25          30
Asp Gly Ser His Phe Leu Ile Ser Leu Cys Phe Leu Leu Leu Ser Ser
          35          40          45
Asp Val Leu Cys Pro Ser Val Arg Val Glu Gly Asp Arg Phe Lys His
          50          55          60
Thr Asn Gly Gly Thr Lys Glu Ile Thr Gly Leu Asp Leu Met Asp Leu
          65          70          75          80
Phe Ser Val Lys Glu Ile Leu Gly Lys Arg Glu Asn Gly Ala Gln Ser
          85          90          95
Ser Tyr Val Arg Met Gly Ser Phe Pro Val Val Gln Ser Thr Glu Asp
          100          105          110
Val Phe Pro Gln Gly Leu Pro Asp Glu Tyr Ala Phe Val Thr Thr Phe
          115          120          125
Arg Phe Arg Lys Thr Ser Arg Lys Glu Asp Trp Tyr Ile Trp Gln Val
          130          135          140
Ile Asp Gln Tyr Gly Ile Pro Gln Val Ser Ile Arg Leu Asp Gly Glu

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145	150	155	160
Asn Lys Ala Val	Glu Tyr Asn Ala Val	Gly Ala Met Lys Asp Ala Val	
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Arg Val Val	Phe Arg Gly Ser Arg Val	Asn Asp Leu Phe Asp Arg Asp	
	180	185	190
Trp His Lys Met Ala Leu Ser Ile	Gln Ala Gln Asn Val Ser Leu His		
	195	200	205
Ile Asp Cys Ala Leu Val	Gln Thr Leu Pro Ile Glu Glu Arg Glu Asn		
	210	215	220
Ile Asp Ile Gln Gly Lys Thr Val	Ile Gly Lys Arg Leu Tyr Asp Ser		
	225	230	235
Val Pro Ile Asp Val Ser Thr Arg Gly	Pro Ser Ala Ala Gln Val Leu		
	245	250	255
Arg Pro Pro Gly Arg Ser Leu Gly	Ala Lys Cys Pro Gln Cys Ser Pro		
	260	265	270
His Leu His Glu Pro Gly Thr Lys Ser Ser Pro	Trp Thr Val Leu Glu		
	275	280	285
Gly Lys Thr Leu Thr Gln Lys Thr Ala Ile Phe	Glu Pro Gln Phe Thr		
	290	295	300
Ile Thr His Val Leu Thr His Ser Val Ile Gln Pro Phe His Gln Ser			
	305	310	315
Phe Ile Thr Tyr Thr Leu Ser Thr Tyr Tyr Val Pro Gly Thr Val Leu			
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Cys Thr Gly Asp Thr Gly Thr Arg Lys Arg Glu Gln Asp			
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<210> 13
 <211> 395
 <212> DNA
 <213> Homo sapiens

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<210> 14
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 14

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Asp Val Ala Asn Gln Val Lys Ser Leu Asn Tyr Glu Lys Lys Ile Lys
20 25 30

Lys Phe Pro Ile Phe Lys Ala Val Val Phe Lys Ser Gln Val Val Thr
35 40 45

Gly Thr Asn Phe His Val Ala Asp Asn Ile Val Tyr Phe Gln Val Phe
50 55 60

Asn Ser Leu Pro His Glu Asn Lys Pro Leu Thr Ser Ser Asp Tyr Gln
65 70 75 80

Pro Lys Ala Asn Gln Asp Lys Leu Leu Tyr Phe
85 90

<210> 15

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 15

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gaagatctac gaggcgcca agtttcgttt cggccgcccgc cggagagctg tgctgccgtt 780
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<210> 16

<211> 379

<212> PRT

<213> Homo sapiens

<400> 16

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Ile Leu Gly Ser Thr Pro Ser Gly Ala Val Leu Pro Gly Arg Gly Pro	35	40	45
Pro Phe Ser Val Phe Thr Val Leu Val Val Thr Leu Leu Val Leu Leu	50	55	60
Ile Ala Ala Thr Phe Leu Trp Asn Leu Leu Val Pro Val Thr Ile Pro	65	70	75
Arg Val Arg Ala Phe His Arg Val Pro His Asn Leu Val Ala Ser Thr	85	90	95
Ala Val Ser Asp Glu Leu Val Ala Ala Leu Ala Met Pro Pro Ser Leu	100	105	110
Ala Ser Glu Leu Ser Thr Gly Arg Arg Leu Leu Gly Arg Ser Leu	115	120	125
Cys His Val Trp Ile Ser Phe Asp Ala Gly Ala Cys Leu Cys Cys Pro	130	135	140
Ala Gly Leu Gly Asn Val Ala Ala Ile Ala Leu Gly Arg Asp Gly Ala	145	150	155
Ile Thr Arg His Leu Gln His Thr Leu Arg Thr Arg Ser Arg Ala Ser	165	170	175
Leu Leu Met Ile Ala Leu Ala Arg Val Pro Ser Ala Leu Ile Ala Leu	180	185	190
Ala Pro Leu Leu Phe Gly Arg Gly Glu Val Cys Asp Ala Arg Leu Gln	195	200	205
Arg Cys Gln Val Ser Arg Glu Pro Ser Tyr Ala Ala Phe Ser Thr Arg	210	215	220
Gly Ala Phe His Leu Pro Leu Gly Val Val Pro Phe Val Tyr Arg Lys	225	230	235
Ile Tyr Glu Ala Ala Lys Phe Arg Phe Gly Arg Arg Arg Arg Ala Val	245	250	255
Leu Pro Leu Pro Ala Thr Met Gln Val Arg Ser Lys Val Lys Glu Ala	260	265	270
Pro Asp Glu Ala Glu Val Val Phe Thr Ala His Cys Lys Ala Thr Val	275	280	285
Ser Phe Gln Val Ser Gly Asp Ser Trp Arg Glu Gln Lys Glu Arg Arg	290	295	300
Ala Ala Met Met Val Gly Ile Leu Ile Gly Val Phe Val Leu Cys Trp			

Gly Ala Val Arg Met Trp Gly Ile Met Gly Thr Val Leu Leu Thr Gly
 85 90 95
 Gly Leu Lys Gln Thr Val Cys Phe Ile Asn Phe Ile Asp Asn Ser Thr
 100 105 110
 Val Lys Phe Trp Ser Trp Val Phe Leu Leu Ser Lys Val Ile Glu Leu
 115 120 125
 Gly Asp Thr Ala Phe Ile Ile Leu Arg Lys Arg Pro Leu Ile Phe Ile
 130 135 140
 His Trp Tyr His His Ser Thr Val Leu Val Tyr Thr Ser Phe Gly Tyr
 145 150 155 160
 Lys Asn Lys Val Pro Ala Gly Gly Trp Phe Val Thr Met Asn Phe Gly
 165 170 175
 Val His Ala Ile Met Tyr Thr Tyr Tyr Thr Leu Lys Ala Ala Asn Val
 180 185 190
 Lys Pro Pro Lys Met Leu Pro Met Leu Ile Thr Ser Leu Gln Ile Leu
 195 200 205
 Gln Met Phe Val Gly Ala Ile Val Ser Ile Leu Thr Tyr Ile Trp Arg
 210 215 220
 Gln Asp Gln Gly Cys His Thr Thr Met Glu His Leu Phe Trp Ser Phe
 225 230 235 240
 Ile Leu Tyr Met Thr Tyr Phe Ile Leu Phe Ala His Phe Phe Cys Gln
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 Thr Tyr Ile Arg Pro Lys Val Lys Ala Lys Thr Lys Ser Gln
 260 265 270

<210> 19
 <211> 815
 <212> DNA
 <213> Homo sapiens

<400> 19
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815

<210> 20
<211> 270
<212> PRT
<213> Homo sapiens

<400> 20

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Pro	Tyr	Asn	Phe	Glu	Leu	Ser	Lys	Asp	Met	Arg	Pro	Phe	Phe	Glu	Glu	
			20					25					30			
Tyr	Trp	Ala	Thr	Ser	Phe	Pro	Ile	Ala	Leu	Ile	Tyr	Leu	Val	Leu	Ile	
		35					40					45				
Ala	Val	Gly	Gln	Asn	Tyr	Met	Lys	Glu	Arg	Lys	Gly	Phe	Asn	Leu	Gln	
	50					55					60					
Gly	Pro	Leu	Ile	Leu	Trp	Ser	Phe	Cys	Leu	Ala	Ile	Phe	Ser	Ile	Leu	
65					70					75					80	
Gly	Ala	Val	Arg	Met	Trp	Gly	Ile	Met	Gly	Thr	Val	Leu	Leu	Thr	Gly	
				85					90					95		
Gly	Leu	Lys	Gln	Thr	Val	Cys	Phe	Ile	Asn	Phe	Ile	Asp	Asn	Ser	Thr	
		100						105					110			
Val	Lys	Phe	Trp	Ser	Trp	Val	Phe	Leu	Leu	Ser	Lys	Val	Ile	Glu	Leu	
	115						120					125				
Gly	Asp	Thr	Ala	Phe	Ile	Ile	Leu	Arg	Lys	Arg	Pro	Leu	Ile	Phe	Ile	
	130					135					140					
His	Trp	Tyr	His	His	Ser	Thr	Val	Leu	Val	Tyr	Thr	Ser	Phe	Gly	Tyr	
145					150					155					160	
Lys	Asn	Lys	Val	Pro	Ala	Gly	Gly	Trp	Phe	Val	Thr	Met	Asn	Phe	Gly	
				165					170					175		
Val	His	Ala	Ile	Met	Tyr	Thr	Tyr	Tyr	Thr	Leu	Lys	Ala	Ala	Asn	Val	
		180						185					190			
Lys	Pro	Pro	Lys	Met	Leu	Pro	Met	Leu	Ile	Thr	Ser	Leu	Gln	Ile	Leu	
		195					200						205			
Gln	Met	Phe	Val	Gly	Ala	Ile	Val	Ser	Ile	Leu	Thr	Tyr	Ile	Trp	Arg	
	210					215						220				
Gln	Asp	Gln	Gly	Cys	His	Thr	Thr	Met	Glu	His	Leu	Phe	Trp	Ser	Phe	
225					230					235					240	
Ile	Leu	Tyr	Met	Thr	Tyr	Phe	Ile	Leu	Phe	Ala	His	Phe	Phe	Cys	Gln	
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 260 265 270

<210> 21
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 21
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 acgggaggg 729

<210> 22
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 22
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 35 40 45
 Val Gly Lys Glu Asp Phe Glu Lys Val Arg Gln Trp Val Ala Asn Leu
 50 55 60
 Val Asp Thr Phe Glu Val Gly Pro Asp Arg Thr Arg Val Gly Val Val
 65 70 75 80
 Arg Tyr Ser Asp Arg Pro Thr Thr Ala Phe Glu Leu Gly Leu Phe Gly
 85 90 95
 Ser Gln Glu Glu Val Lys Ala Ala Ala Arg Arg Leu Ala Tyr His Gly
 100 105 110
 Gly Asn Thr Asn Thr Gly Asp Ala Leu Arg Tyr Ile Thr Ala Arg Ser
 115 120 125
 Phe Ser Pro His Ala Gly Gly Arg Pro Arg Asp Arg Ala Tyr Lys Gln
 130 135 140

Val Ala Ile Leu Leu Thr Asp Gly Arg Ser Gln Asp Leu Val Leu Asp
145 150 155 160

Ala Ala Ala Ala Ala His Arg Ala Gly Ile Arg Ile Phe Ala Val Gly
165 170 175

Val Gly Glu Ala Leu Lys Glu Glu Leu Glu Glu Ile Ala Ser Glu Pro
180 185 190

Lys Ser Ala His Val Phe His Val Ser Asp Phe Asn Ala Ile Asp Lys
195 200 205

Ile Arg Gly Lys Leu Arg Arg Arg Leu Cys Glu Ser Glu Cys Ala Arg
210 215 220

Ala Pro Cys Gly Pro Ser Gln Glu
225 230

<210> 23
<211> 682
<212> DNA
<213> Homo sapiens

<400> 23
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gctcttccat aagctccctt cctcatgcc gggcaatgtg cttgtcatcg tggctccat 180
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cacttgctgt ggcgtaaatg gcatgagtga ttggtccagc ggaccgcaag catcttgccc 480
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tgcaactgcc ctgtgctggg ga 682

<210> 24
<211> 218
<212> PRT
<213> Homo sapiens

<400> 24
Met Gly Thr Ser Ser Leu Lys Leu Trp Lys Tyr Val Leu Ser Phe Phe
1 5 10 15
Leu Phe Phe Leu Ser Phe Leu Leu Ser Leu Thr Phe Gly Met Tyr Pro
20 25 30
Leu Ile His Asn Ser Leu Gly Val Leu Phe His Lys Leu Pro Ser Leu
35 40 45
Met Pro Gly Asn Val Leu Val Ile Val Val Ser Ile Ile Thr Val Val
50 55 60

Ala Phe Leu Gly Cys Ile Gly Ser Val Lys Lys Asn Arg Cys Leu Leu
 65 70 75 80
 Met Ser Leu Phe Ile Leu Leu Pro Val Ile Leu Leu Ala Glu Val Ile
 85 90 95
 Leu Ala Ile Leu His Phe Val Tyr Glu Arg Lys Leu Asn Val Tyr Val
 100 105 110
 Ala Glu Gly Leu Thr Asp Ser Ile Tyr His Tyr His Trp Asp Asn Ser
 115 120 125
 Thr Lys Ala Met Trp Asp Ser Ile Gln Ser Phe Cys Thr Cys Cys Gly
 130 135 140
 Val Asn Gly Met Ser Asp Trp Ser Ser Gly Pro Gln Ala Ser Cys Pro
 145 150 155 160
 Ser Asp Pro Lys Val Lys Gly Cys Tyr Ala Lys Ala Arg Leu Trp Phe
 165 170 175
 His Ala Asn Phe Leu Tyr Ile Arg Ile Ile Thr Ile Cys Val Ile Cys
 180 185 190
 Ala Ile Gln Val Val Arg Met Ser Phe Ala Leu Thr Pro Asn Ser Gln
 195 200 205
 Ile Asp Lys Thr Ser Gln Ala Leu Gly Val
 210 215

<210> 25
 <211> 1580
 <212> DNA
 <213> Homo sapiens

<400> 25
 cgtgggtgacc ccgggggatg gagccgttcc tcaggaggcg gctggccttc ctgtccttct 60
 tctgggacaa gatctggccg gcgggcggcg agccggacca tggcaccccc gggtccttgg 120
 accccaacac tgaccagtg cccacgctcc ccgcccagcc ttgcagcccc ttccctcagc 180
 tcttccttgc gctctatgac ttcacggcgc ggtgtggcgg ggagctgagt gtccgcccgc 240
 gggacaggct ctgtgccctc gaagaggggg gcggtacat cttcgcacgc aggccttccg 300
 gccagcccag cgccgggctc gtgcccata cccacgtggc caaggcttct cctgagacgc 360
 tctcagacca accgctgct gtttgcagct ggtactttag cggggtcagt cggacccagg 420
 cacagcagct gtcctctcc ccaccaacg aaccaggggc cttcctcatc cggcccagcg 480
 agagcagcct cgggggctac tcaactgtcag tccgggcca ggccaagggtc tgccactacc 540
 ggggtctccat ggcagctgat ggcagcctct acctgcagaa gggacggctc tttcccggcc 600
 tggaggagct gctcacctac tacaaggcca actggaagct gatccagaac cccctgctgc 660
 agccctgcat gccccagtg ggccctgcct gccaccctc cctgcagaag gccctgcggc 720
 aggacgtgtg ggagcggcca cactccgaat tcgcccttgg gaggaagctg ggtgaagct 780
 actttgggga ggtgtgggaa ggccctgtggc tgggctccct gcccggtggc atcaagggtca 840
 tcaagtcagc caacatgaag ctcaactgacc tcgccaagga gatccagaca ctgaagggcc 900
 tgccggcacga gcggctcatc cggctgcacg cagtgtgctc gggcggggag cctgtgtaca 960
 tctcaccgga actcatgcgc aaggggaacc tgcaggcctt cctgggcagt ggctctgctc 1020
 cactcccctc tgcagactct gatgagaaag tcctgcccgt ttcggagctg ctggacatcg 1080
 cctggcaggt ggctgagggc atgtgttacc tggagtcgca gaattacatc caccgggacc 1140

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tggccgcccag gaacatcctc gtcgggggaaa acaccctctg caaagttggg gacttcgggt 1200
tagccaggct tatcaaggta gggccctcag agggccagga cgacatctac tccccgagca 1260
gcagctccaa gatcccggtc aagtggacag cgcctgaggc ggccaattat cgtgtcttct 1320
cccagaagtc agacgtctgg tccttcggcg tcctgctgca cgaggttttc acctatggcc 1380
agtgtcccta tgaagggtgg atgaccaacc acgagacgct gcagcagatc atgcgagggg 1440
accggctgcc gcgcccggct gcctgcccga cggaggtcta cttgctcatg ctggagtgtc 1500
ggaggagcag ccccgaggaa cggccctcct tcgccacgct gcgggagaag ctgcacgcca 1560
tccacagatg ccaccctga 1580

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<210> 26
<211> 520
<212> PRT
<213> Homo sapiens

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<400> 26
Met Glu Pro Phe Leu Arg Arg Arg Leu Ala Phe Leu Ser Phe Phe Trp
  1             5             10             15

Asp Lys Ile Trp Pro Ala Gly Gly Glu Pro Asp His Gly Thr Pro Gly
      20             25             30

Ser Leu Asp Pro Asn Thr Asp Pro Val Pro Thr Leu Pro Ala Glu Pro
      35             40             45

Cys Ser Pro Phe Pro Gln Leu Phe Leu Ala Leu Tyr Asp Phe Thr Ala
      50             55             60

Arg Cys Gly Gly Glu Leu Ser Val Arg Arg Gly Asp Arg Leu Cys Ala
      65             70             75             80

Leu Glu Glu Gly Gly Gly Tyr Ile Phe Ala Arg Arg Leu Ser Gly Gln
      85             90             95

Pro Ser Ala Gly Leu Val Pro Ile Thr His Val Ala Lys Ala Ser Pro
      100            105            110

Glu Thr Leu Ser Asp Gln Pro Pro Ala Val Cys Ser Trp Tyr Phe Ser
      115            120            125

Gly Val Ser Arg Thr Gln Ala Gln Gln Leu Leu Leu Ser Pro Pro Asn
      130            135            140

Glu Pro Gly Ala Phe Leu Ile Arg Pro Ser Glu Ser Ser Leu Gly Gly
      145            150            155            160

Tyr Ser Leu Ser Val Arg Ala Gln Ala Lys Val Cys His Tyr Arg Val
      165            170            175

Ser Met Ala Ala Asp Gly Ser Leu Tyr Leu Gln Lys Gly Arg Leu Phe
      180            185            190

Pro Gly Leu Glu Glu Leu Leu Thr Tyr Tyr Lys Ala Asn Trp Lys Leu
      195            200            205

Ile Gln Asn Pro Leu Leu Gln Pro Cys Met Pro Gln Val Gly Leu Pro
      210            215            220

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Cys Pro Pro Ser Leu Gln Lys Ala Leu Arg Gln Asp Val Trp Glu Arg
 225 230 235 240
 Pro His Ser Glu Phe Ala Leu Gly Arg Lys Leu Gly Glu Gly Tyr Phe
 245 250 255
 Gly Glu Val Trp Glu Gly Leu Trp Leu Gly Ser Leu Pro Val Ala Ile
 260 265 270
 Lys Val Ile Lys Ser Ala Asn Met Lys Leu Thr Asp Leu Ala Lys Glu
 275 280 285
 Ile Gln Thr Leu Lys Gly Leu Arg His Glu Arg Leu Ile Arg Leu His
 290 295 300
 Ala Val Cys Ser Gly Gly Glu Pro Val Tyr Ile Leu Thr Glu Leu Met
 305 310 315 320
 Arg Lys Gly Asn Leu Gln Ala Phe Leu Gly Ser Gly Ser Ala Pro Leu
 325 330 335
 Pro Ser Ala Asp Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu
 340 345 350
 Asp Ile Ala Trp Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln
 355 360 365
 Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu
 370 375 380
 Asn Thr Leu Cys Lys Val Gly Asp Phe Gly Leu Ala Arg Leu Ile Lys
 385 390 395 400
 Val Gly Pro Ser Glu Gly Gln Asp Asp Ile Tyr Ser Pro Ser Ser Ser
 405 410 415
 Ser Lys Ile Pro Val Lys Trp Thr Ala Pro Glu Ala Ala Asn Tyr Arg
 420 425 430
 Val Phe Ser Gln Lys Ser Asp Val Trp Ser Phe Gly Val Leu Leu His
 435 440 445
 Glu Val Phe Thr Tyr Gly Gln Cys Pro Tyr Glu Gly Gly Met Thr Asn
 450 455 460
 His Glu Thr Leu Gln Gln Ile Met Arg Gly Tyr Arg Leu Pro Arg Pro
 465 470 475 480
 Ala Ala Cys Pro Thr Glu Val Tyr Leu Leu Met Leu Glu Cys Trp Arg
 485 490 495
 Ser Ser Pro Glu Glu Arg Pro Ser Phe Ala Thr Leu Arg Glu Lys Leu
 500 505 510
 His Ala Ile His Arg Cys His Pro
 515 520

<210> 27
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 27
 ctgtggtttc acgccaattt cctgta

26

<210> 28
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 28
 accacctgga ttgcacatat ta

22

<210> 29
 <211> 257
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 29
 Thr Leu Gly Lys Lys Leu Gly Glu Gly Ala Phe Gly Glu Val Tyr Lys
 1 5 10 15
 Gly Thr Leu Lys Gly Lys Gly Gly Val Glu Val Glu Val Ala Val Lys
 20 25 30
 Thr Leu Lys Glu Asp Ala Ser Glu Gln Gln Ile Glu Glu Phe Leu Arg
 35 40 45
 Glu Ala Arg Leu Met Arg Lys Leu Asp His Pro Asn Ile Val Lys Leu
 50 55 60
 Leu Gly Val Cys Thr Glu Glu Glu Pro Leu Met Ile Val Met Glu Tyr
 65 70 75 80
 Met Glu Gly Gly Asp Leu Leu Asp Tyr Leu Arg Lys Asn Arg Pro Lys
 85 90 95
 Glu Leu Ser Leu Ser Asp Leu Leu Ser Phe Ala Leu Gln Ile Ala Arg

100					105					110					
Gly	Met	Glu	Tyr	Leu	Glu	Ser	Lys	Asn	Phe	Val	His	Arg	Asp	Leu	Ala
	115						120					125			
Ala	Arg	Asn	Cys	Leu	Val	Gly	Glu	Asn	Lys	Thr	Val	Lys	Ile	Ala	Asp
	130					135					140				
Phe	Gly	Leu	Ala	Arg	Asp	Leu	Tyr	Asp	Asp	Asp	Tyr	Tyr	Arg	Lys	Lys
145					150					155					160
Lys	Ser	Pro	Arg	Leu	Pro	Ile	Arg	Trp	Met	Ala	Pro	Glu	Ser	Leu	Lys
				165					170					175	
Asp	Gly	Lys	Phe	Thr	Ser	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	Leu
			180					185					190		
Leu	Trp	Glu	Ile	Phe	Thr	Leu	Gly	Glu	Ser	Pro	Tyr	Pro	Gly	Met	Ser
	195						200					205			
Asn	Glu	Glu	Val	Leu	Glu	Tyr	Leu	Lys	Lys	Gly	Tyr	Arg	Leu	Pro	Gln
	210					215					220				
Pro	Pro	Asn	Cys	Pro	Asp	Glu	Ile	Tyr	Asp	Leu	Met	Leu	Gln	Cys	Trp
225					230					235					240
Ala	Glu	Asp	Pro	Glu	Asp	Arg	Pro	Thr	Phe	Ser	Glu	Leu	Val	Glu	Arg
				245					250					255	

Leu

<210> 30
 <211> 254
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 30
 Tyr Glu Leu Gly Glu Lys Leu Gly Ser Gly Ala Phe Gly Lys Val Tyr
 1 5 10 15
 Lys Gly Lys His Lys Asp Thr Gly Glu Ile Val Ala Ile Lys Ile Leu
 20 25 30
 Lys Lys Arg Ser Leu Ser Glu Lys Lys Arg Phe Leu Arg Glu Ile
 35 40 45
 Gln Ile Leu Arg Arg Leu Ser His Pro Asn Ile Val Arg Leu Leu Gly
 50 55 60
 Val Phe Glu Glu Asp Asp His Leu Tyr Leu Val Met Glu Tyr Met Glu
 65 70 75 80

Asp Val Phe Glu Asp Asp Asp Lys Leu Tyr Leu Val Met Glu Tyr Cys
 65 70 75 80
 Glu Gly Gly Asp Leu Phe Asp Leu Leu Lys Lys Arg Gly Arg Leu Ser
 85 90 95
 Glu Asp Glu Ala Arg Phe Tyr Ala Arg Gln Ile Leu Ser Ala Leu Glu
 100 105 110
 Tyr Leu His Ser Gln Gly Ile Ile His Arg Asp Leu Lys Pro Glu Asn
 115 120 125
 Ile Leu Leu Asp Ser Asp Gly His Val Lys Leu Ala Asp Phe Gly Leu
 130 135 140
 Ala Lys Gln Leu Asp Ser Gly Gly Thr Leu Leu Thr Thr Phe Val Gly
 145 150 155 160
 Thr Pro Glu Tyr Met Ala Pro Glu Val Leu Leu Gly Lys Gly Tyr Gly
 165 170 175
 Lys Ala Val Asp Ile Trp Ser Leu Gly Val Ile Leu Tyr Glu Leu Leu
 180 185 190
 Thr Gly Lys Pro Pro Phe Pro Gly Asp Asp Gln Leu Leu Ala Leu Phe
 195 200 205
 Lys Lys Ile Gly Lys Pro Pro Pro Phe Pro Pro Glu Trp Lys
 210 215 220
 Ile Ser Pro Glu Ala Lys Asp Leu Ile Lys Lys Leu Leu Val Lys Asp
 225 230 235 240
 Pro Glu Lys Arg Leu Thr Ala Glu Glu Ala
 245 250

<210> 32
 <211> 312
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 32
 Asn Glu Lys Glu Gln Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr
 1 5 10 15
 Ile Asp Lys Val Arg Phe Leu Glu Gln Asn Lys Glu Leu Glu Val
 20 25 30
 Lys Ile Glu Glu Leu Arg Gln Lys Gln Ala Pro Ser Val Ser Arg Leu
 35 40 45
 Tyr Ser Leu Tyr Glu Thr Glu Ile Glu Glu Leu Arg Arg Gln Ile Asp

50	55	60
Gln Leu Thr Asn Glu Arg Ala Arg Leu Gln Leu Glu Ile Asp Asn Leu		
65	70	75 80
Arg Glu Ala Ala Glu Asp Phe Arg Lys Lys Tyr Glu Asp Glu Ile Asn		
	85	90 95
Leu Arg Gln Glu Ala Glu Asn Asp Leu Val Gly Leu Arg Lys Asp Leu		
	100	105 110
Asp Glu Ala Thr Leu Ala Arg Val Asp Leu Glu Asn Lys Val Glu Ser		
	115	120 125
Leu Gln Glu Glu Leu Glu Phe Leu Lys Lys Asn His Glu Glu Glu Val		
	130	135 140
Lys Glu Leu Gln Ala Gln Ile Gln Asp Thr Val Asn Val Glu Met Asp		
	145	150 155 160
Ala Ala Arg Lys Leu Asp Leu Thr Lys Ala Leu Arg Glu Ile Arg Ala		
	165	170 175
Gln Tyr Glu Glu Ile Ala Lys Lys Asn Arg Gln Glu Ala Glu Glu Trp		
	180	185 190
Tyr Lys Ser Lys Leu Glu Glu Leu Gln Thr Ala Ala Ala Arg Asn Gly		
	195	200 205
Glu Ala Leu Arg Ser Ala Lys Glu Glu Ile Thr Glu Leu Arg Arg Gln		
	210	215 220
Ile Gln Ser Leu Glu Ile Glu Leu Gln Ser Leu Lys Ala Gln Asn Ala		
	225	230 235 240
Ser Leu Glu Arg Gln Leu Ala Glu Leu Glu Glu Arg Tyr Glu Leu Glu		
	245	250 255
Leu Arg Gln Tyr Gln Ala Leu Ile Ser Gln Leu Glu Glu Glu Leu Gln		
	260	265 270
Gln Leu Arg Glu Glu Met Ala Arg Gln Leu Arg Glu Tyr Gln Glu Leu		
	275	280 285
Leu Asp Val Lys Leu Ala Leu Asp Ile Glu Ile Ala Thr Tyr Arg Lys		
	290	295 300
Leu Leu Glu Gly Glu Glu Ser Arg		
305	310	

<210> 33
 <211> 336
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Consensus
sequence

<400> 33

Glu	Lys	Lys	Ala	Lys	Gln	Leu	Glu	Ser	Gln	Leu	Ser	Glu	Leu	Gln	Val	1	5	10	15
Lys	Leu	Asp	Glu	Leu	Gln	Arg	Gln	Leu	Asn	Asp	Leu	Thr	Ser	Gln	Lys	20	25	30	
Ser	Arg	Leu	Gln	Ser	Glu	Asn	Ser	Asp	Leu	Thr	Arg	Gln	Leu	Glu	Glu	35	40	45	
Ala	Glu	Ala	Gln	Val	Ser	Asn	Leu	Ser	Lys	Leu	Lys	Ser	Gln	Leu	Glu	50	55	60	
Ser	Gln	Leu	Glu	Glu	Ala	Lys	Arg	Ser	Leu	Glu	Glu	Glu	Ser	Arg	Glu	65	70	75	80
Arg	Ala	Asn	Leu	Gln	Ala	Gln	Leu	Arg	Gln	Leu	Glu	His	Asp	Leu	Asp	85	90	95	
Ser	Leu	Arg	Glu	Gln	Leu	Glu	Glu	Glu	Ser	Glu	Ala	Lys	Ala	Glu	Leu	100	105	110	
Glu	Arg	Gln	Leu	Ser	Lys	Ala	Asn	Ala	Glu	Ile	Gln	Gln	Trp	Arg	Ser	115	120	125	
Lys	Phe	Glu	Ser	Glu	Gly	Ala	Leu	Arg	Ala	Glu	Glu	Leu	Glu	Glu	Leu	130	135	140	
Lys	Lys	Lys	Leu	Asn	Gln	Lys	Ile	Ser	Glu	Leu	Glu	Glu	Ala	Ala	Glu	145	150	155	160
Ala	Ala	Asn	Ala	Lys	Cys	Asp	Ser	Leu	Glu	Lys	Thr	Lys	Ser	Arg	Leu	165	170	175	
Gln	Ser	Glu	Leu	Glu	Asp	Leu	Gln	Ile	Glu	Leu	Glu	Arg	Ala	Asn	Ala	180	185	190	
Ala	Ala	Ser	Glu	Leu	Glu	Lys	Lys	Gln	Lys	Asn	Phe	Asp	Lys	Ile	Leu	195	200	205	
Ala	Glu	Trp	Lys	Arg	Lys	Val	Asp	Glu	Leu	Gln	Ala	Glu	Leu	Asp	Thr	210	215	220	
Ala	Gln	Arg	Glu	Ala	Arg	Asn	Leu	Ser	Thr	Glu	Leu	Phe	Arg	Leu	Lys	225	230	235	240
Asn	Glu	Leu	Glu	Glu	Leu	Lys	Asp	Gln	Val	Glu	Ala	Leu	Arg	Arg	Glu	245	250	255	
Asn	Lys	Asn	Leu	Gln	Asp	Glu	Ile	His	Asp	Leu	Thr	Asp	Gln	Leu	Gly	260	265	270	
Glu	Gly	Gly	Arg	Asn	Val	His	Glu	Leu	Glu	Lys	Ala	Arg	Arg	Arg	Leu	275	280	285	

Glu Ala Glu Lys Asp Glu Leu Gln Ala Ala Leu Glu Glu Ala Glu Ala
 290 295 300

Ala Leu Glu Leu Glu Glu Ser Lys Val Leu Arg Ala Gln Val Glu Leu
 305 310 315 320

Ser Gln Ile Arg Ser Glu Ile Glu Arg Arg Leu Ala Glu Lys Glu Glu
 325 330 335

<210> 34
 <211> 76
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 34
 Lys Phe Leu Lys Ser Pro Lys Lys Glu Phe Arg Lys Ile Leu Asp Leu
 1 5 10 15
 Leu Gln Arg Tyr Ala Leu Ile His Pro Asn Val Ser Phe Ser Leu Thr
 20 25 30
 Lys Glu Gly Lys Ala Leu Leu Gln Leu Lys Thr Ser Pro Ser Ser Leu
 35 40 45
 Lys Glu Arg Ile Arg Ser Val Phe Gly Thr Ala Val Leu Lys Asn Leu
 50 55 60
 Ile Pro Phe Glu Glu Lys Asp Gly Asp Phe Arg Ile
 65 70 75

<210> 35
 <211> 55
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 35
 Gly Gly Leu Ser Pro Ala Asp Asp Asn Glu Asn Asp Pro Glu Val Gln
 1 5 10 15
 Glu Ala Ala Asp Phe Ala Val Ala Glu Tyr Asn Glu Lys Ser Asp Gly
 20 25 30
 Tyr Lys Phe Glu Leu Val Glu Val Val Arg Ala Lys Ser Gln Val Val

35	40	45
Ala Gly Thr Leu Thr Asn Tyr		
50	55	
<210> 36		
<211> 253		
<212> PRT		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence:Consensus sequence		
<400> 36		
Asn Leu Leu Val Ile Leu Val Ile Leu Arg Thr Lys Lys Leu Arg Thr		
1	5	10 15
Pro Thr Asn Ile Phe Leu Leu Asn Leu Ala Val Ala Asp Leu Leu Phe		
20	25	30
Leu Leu Thr Leu Pro Pro Trp Ala Leu Tyr Tyr Leu Val Gly Gly Asp		
35	40	45
Trp Val Phe Gly Asp Ala Leu Cys Lys Leu Val Gly Ala Leu Phe Val		
50	55	60
Val Asn Gly Tyr Ala Ser Ile Leu Leu Leu Thr Ala Ile Ser Ile Asp		
65	70	75 80
Arg Tyr Leu Ala Ile Val His Pro Leu Arg Tyr Arg Arg Ile Arg Thr		
85	90	95
Pro Arg Arg Ala Lys Val Leu Ile Leu Leu Val Trp Val Leu Ala Leu		
100	105	110
Leu Leu Ser Leu Pro Pro Leu Leu Phe Ser Trp Leu Arg Thr Val Glu		
115	120	125
Glu Gly Asn Thr Thr Val Cys Leu Ile Asp Phe Pro Glu Glu Ser Val		
130	135	140
Lys Arg Ser Tyr Val Leu Leu Ser Thr Leu Val Gly Phe Val Leu Pro		
145	150	155 160
Leu Leu Val Ile Leu Val Cys Tyr Thr Arg Ile Leu Arg Thr Leu Arg		
165	170	175
Lys Arg Ala Arg Ser Gln Arg Ser Leu Lys Arg Arg Ser Ser Ser Glu		
180	185	190
Arg Lys Ala Ala Lys Met Leu Leu Val Val Val Val Phe Val Leu		
195	200	205
Cys Trp Leu Pro Tyr His Ile Val Leu Leu Leu Asp Ser Leu Cys Leu		
210	215	220

Leu Ser Ile Trp Arg Val Leu Pro Thr Ala Leu Leu Ile Thr Leu Trp
 225 230 235 240

Leu Ala Tyr Val Asn Ser Cys Leu Asn Pro Ile Ile Tyr
 245 250

<210> 37
 <211> 269
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 37
 Gln Val Val Thr Tyr Ser Thr Val Tyr Arg Phe Pro Gly Lys Gln Phe
 1 5 10 15

Glu Phe Ile Tyr Gly Lys Thr Ile Leu Phe Glu Ser Tyr His Ala Ile
 20 25 30

Lys Ile Ile Asn Arg Tyr Tyr Ile Ile Ile Phe Gly Gly Gln Gln Ile
 35 40 45

Met Glu Lys Tyr Lys Pro Phe Lys Leu Lys Thr Pro Leu Gln Val His
 50 55 60

Asn Leu Phe Leu Thr Ser Phe Ser Ile Leu Leu Leu Leu Met Val
 65 70 75 80

Glu Gln Leu Val Pro Ser Val Tyr Ala Glu Gly Leu Tyr Phe Ser Ile
 85 90 95

Cys Asn Ser Glu Ala Trp Thr Gln Val Leu Val Thr Leu Tyr Tyr Leu
 100 105 110

Asn Tyr Met Ser Lys Phe Val Glu Leu Ile Asp Thr Val Phe Ile Val
 115 120 125

Leu Arg Lys Arg Lys Leu Ile Phe Leu His Thr Tyr His His Gly Ala
 130 135 140

Thr Ala Leu Leu Cys Tyr His Gln Leu Lys Gly His Thr Ala Val Gly
 145 150 155 160

Trp Val Pro Ile Leu Leu Asn Leu Gly Val His Val Leu Met Tyr Trp
 165 170 175

Tyr Tyr Phe Leu Ser Ala Leu Gly Ile Arg Val Trp Trp Lys Met Trp
 180 185 190

Val Thr Arg Leu Gln Ile Ile Gln Phe Leu Leu Asp Val Ile Phe Ile
 195 200 205

Tyr Phe Ala Val Tyr Gln Lys Lys Val His Gly Tyr Leu Pro Ile Leu
 210 215 220

Pro Asn Cys Gly Asp Cys Gln Gly Ser Trp Ala Ala Leu Ala Leu Gly
 225 230 235 240

Phe Ala Ile Tyr Thr Ser Tyr Leu Leu Leu Phe Ile Ser Phe Tyr Ile
 245 250 255

His Ala Tyr Lys Lys Lys Ser Asn Lys Thr Val Lys Lys
 260 265

<210> 38

<211> 176

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Consensus
 sequence

<400> 38

Asp Ile Val Phe Leu Leu Asp Gly Ser Gly Ser Ile Gly Pro Gln Asn
 1 5 10 15

Phe Glu Arg Val Lys Asp Phe Val Glu Arg Val Val Glu Arg Leu Asp
 20 25 30

Ile Gly Pro Asp Lys Val Arg Val Gly Leu Val Gln Tyr Ser Asp Asn
 35 40 45

Val Arg Thr Glu Phe Lys Leu Asn Asp Tyr Gln Asn Lys Asp Glu Val
 50 55 60

Leu Gln Ala Leu Arg Lys Ile Gln Tyr Tyr Gly Gly Gly Gly Thr Asn
 65 70 75 80

Thr Gly Thr Ala Leu Gln Tyr Val Val Arg Asn Leu Phe Thr Glu Ala
 85 90 95

Ser Gly Ser Arg Glu Gly Ala Pro Lys Val Leu Val Val Leu Thr Asp
 100 105 110

Gly Arg Ser Gln Asp Asp Pro Ile Arg Asp Val Leu Asn Glu Leu Lys
 115 120 125

Lys Ala Gly Val Asn Val Phe Ala Ile Gly Val Gly Asn Ala Asp Asn
 130 135 140

Val Glu Glu Leu Arg Glu Ile Ala Ser Lys Pro Asp Glu Gln His Val
 145 150 155 160

Phe Lys Val Ser Asp Phe Glu Ala Leu Asp Thr Leu Gln Glu Leu Leu
 165 170 175

<210> 39
 <211> 166
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 39
 Ser Ser Phe Ser Glu Leu Leu Gly Ser Leu Ser Ser Leu Val Ala Ala
 1 5 10 15
 Tyr Val Leu Ile Ala Val Gly Ala Ile Leu Phe Leu Val Gly Phe Leu
 20 25 30
 Gly Cys Cys Gly Ala Ile Arg Glu Ser Arg Cys Leu Leu Gly Leu Tyr
 35 40 45
 Phe Val Phe Leu Leu Leu Ile Phe Ile Leu Glu Val Ala Ala Gly Ile
 50 55 60
 Leu Ala Phe Val Phe Arg Asp Lys Leu Glu Ser Ser Leu Asn Glu Ser
 65 70 75 80
 Leu Lys Asn Ala Ile Lys Asn Tyr Tyr Asp Thr Asp Pro Asp Glu Arg
 85 90 95
 Asn Ala Trp Asp Lys Leu Gln Glu Gln Phe Lys Cys Cys Gly Val Asn
 100 105 110
 Gly Tyr Thr Asp Trp Phe Asp Ser Gln Trp Phe Ser Asn Gly Val Pro
 115 120 125
 Phe Ser Cys Cys Asn Pro Ser Val Ser Cys Asn Ser Ala Gln Asp Glu
 130 135 140
 Glu Asp Thr Ile Tyr Gln Glu Gly Cys Leu Glu Lys Leu Leu Glu Trp
 145 150 155 160
 Leu Glu Glu Asn Leu Leu
 165

<210> 40
 <211> 256
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Consensus
 sequence

<400> 40

Leu Gly Lys Lys Leu Gly Glu Gly Ala Phe Gly Glu Val Tyr Lys Gly
 1 5 10 15
 Thr Leu Lys Gly Lys Gly Gly Val Glu Val Glu Val Ala Val Lys Thr
 20 25 30
 Leu Lys Glu Asp Ala Ser Glu Gln Gln Ile Glu Glu Phe Leu Arg Glu
 35 40 45
 Ala Arg Leu Met Arg Lys Leu Asp His Pro Asn Ile Val Lys Leu Leu
 50 55 60
 Gly Val Cys Thr Glu Glu Glu Pro Leu Met Ile Val Met Glu Tyr Met
 65 70 75 80
 Glu Gly Gly Asp Leu Leu Asp Tyr Leu Arg Lys Asn Arg Pro Lys Glu
 85 90 95
 Leu Ser Leu Ser Asp Leu Leu Ser Phe Ala Leu Gln Ile Ala Arg Gly
 100 105 110
 Met Glu Tyr Leu Glu Ser Lys Asn Phe Val His Arg Asp Leu Ala Ala
 115 120 125
 Arg Asn Cys Leu Val Gly Glu Asn Lys Thr Val Lys Ile Ala Asp Phe
 130 135 140
 Gly Leu Ala Arg Asp Leu Tyr Asp Asp Asp Tyr Tyr Arg Lys Lys Lys
 145 150 155 160
 Ser Pro Arg Leu Pro Ile Arg Trp Met Ala Pro Glu Ser Leu Lys Asp
 165 170 175
 Gly Lys Phe Thr Ser Lys Ser Asp Val Trp Ser Phe Gly Val Leu Leu
 180 185 190
 Trp Glu Ile Phe Thr Leu Gly Glu Ser Pro Tyr Pro Gly Met Ser Asn
 195 200 205
 Glu Glu Val Leu Glu Tyr Leu Lys Lys Gly Tyr Arg Leu Pro Gln Pro
 210 215 220
 Pro Asn Cys Pro Asp Glu Ile Tyr Asp Leu Met Leu Gln Cys Trp Ala
 225 230 235 240
 Glu Asp Pro Glu Asp Arg Pro Thr Phe Ser Glu Leu Val Glu Arg Leu
 245 250 255

<210> 41

<211> 252

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Consensus
sequence

<400> 41

Tyr Glu Leu Gly Glu Lys Leu Gly Ser Gly Ala Phe Gly Lys Val Tyr
1 5 10 15
Lys Gly Lys His Lys Asp Thr Gly Glu Ile Val Ala Ile Lys Ile Leu
20 25 30
Lys Lys Arg Ser Leu Ser Glu Lys Lys Arg Phe Leu Arg Glu Ile
35 40 45
Gln Ile Leu Arg Arg Leu Ser His Pro Asn Ile Val Arg Leu Leu Gly
50 55 60
Val Phe Glu Glu Asp Asp His Leu Tyr Leu Val Met Glu Tyr Met Glu
65 70 75 80
Gly Gly Asp Leu Phe Asp Tyr Leu Arg Arg Asn Gly Leu Leu Leu Ser
85 90 95
Glu Lys Glu Ala Lys Lys Ile Ala Leu Gln Ile Leu Arg Gly Leu Glu
100 105 110
Tyr Leu His Ser Arg Gly Ile Val His Arg Asp Leu Lys Pro Glu Asn
115 120 125
Ile Leu Leu Asp Glu Asn Gly Thr Val Lys Ile Ala Asp Phe Gly Leu
130 135 140
Ala Arg Lys Leu Glu Ser Ser Ser Tyr Glu Lys Leu Thr Thr Phe Val
145 150 155 160
Gly Thr Pro Glu Tyr Met Ala Pro Glu Val Leu Glu Gly Arg Gly Tyr
165 170 175
Ser Ser Lys Val Asp Val Trp Ser Leu Gly Val Ile Leu Tyr Glu Leu
180 185 190
Leu Thr Gly Lys Leu Pro Phe Pro Gly Ile Asp Pro Leu Glu Glu Leu
195 200 205
Phe Arg Ile Lys Glu Arg Pro Arg Leu Arg Leu Pro Leu Pro Pro Asn
210 215 220
Cys Ser Glu Glu Leu Lys Asp Leu Ile Lys Lys Cys Leu Asn Lys Asp
225 230 235 240
Pro Glu Lys Arg Pro Thr Ala Lys Glu Ile Leu Asn
245 250

<210> 42

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 42

ccctgtgggg ccggtgcat ct

22

<210> 43

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 43

agctcaggtc gggttctcgt agctggtgaa

30

<210> 44

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 44

aagctgctca tcttcaacac ataccag

27

<210> 45

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 45

gcctgcaggt ccctgtcac

19

<210> 46

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 46
 atggtcacag ccatgaatgt ctcacat 27

<210> 47
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 47
 cttcactggc tcttggtctt ggcttt 26

<210> 48
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 48
 ctgcagtccc agatctcaga 20

<210> 49
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 49
 gtctgtggtg ctgtccatgg acaac 25

<210> 50
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

<400> 50
 tactgtgcct tgacctcagc 20

<210> 51
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 51
 ccctgtggtg caaagtactg 20

 <210> 52
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 52
 cccaaggtt tacctgatga gtacg 25

 <210> 53
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 53
 cggaagggtg tgacaaagg 19

 <210> 54
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 54
 tggtcacagg gacaaacttc 20

 <210> 55
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 55
 cgttgctgat aacatcgtat acttcca 27

 <210> 56
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 56
 ggtcaagggc ttgttttcat 20

 <210> 57
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 57
 atctcagcat ccttggtacc tt 22

 <210> 58
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 58
 caactctctg gtcctttctg ccctgt 26

 <210> 59
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 59

acacgtcatc gtggtagca

19

<210> 60
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 60
cccctgattt acacagcttt ta

22

<210> 61
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 61
acaacaatgc cttcaagagc ctcttt

26

<210> 62
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 62
ccctgtgttc atctctgctt ag

22

<210> 63
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 63
cccctgattt acacagcttt ta

22

<210> 64
<211> 26

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 64
 acaacaatgc cttcaagagc ctcttt 26

 <210> 65
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 65
 ccctgtgttc atctctgctt ag 22

 <210> 66
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 66
 cccttgattt acacagcttt ta 22

 <210> 67
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 67
 acaacaatgc cttcaagagc ctcttt 26

 <210> 68
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide

primer

<400> 68
ccctgtgttc atctctgctt ag 22

<210> 69
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 69
gtaagcggcc actcatcttt at 22

<210> 70
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 70
cagcacagtg ctcgtgtaca caagct 26

<210> 71
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 71
gcaggcactt tgttcttgta tc 22

<210> 72
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 72
aaggaggagc tggaggagat 20

<210> 73
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 73
aagtcgccc acgtcttcca cgt 23

<210> 74
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 74
atcttgtcga tggcattgaa 20

<210> 75
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 75
gtgaaagggt gctatgcaaa 20

<210> 76
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 76
ctgtggtttc acgccaattt cctgta 26

<210> 77
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 77
 ccacctggat tgcacatatt a 21

 <210> 78
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 78
 acatcctcac ggaactcatg 20

 <210> 79
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 79
 agtggctctg ctccactccc ctct 24

 <210> 80
 <211> 22
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:oligonucleotide
 primer

 <400> 80
 Gly Gly Cys Ala Gly Gly Ala Cys Thr Thr Thr Cys Thr Cys Ala Thr
 1 5 10 15
 Cys Ala Gly Ala Gly Thr
 20

 <210> 81
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 81

Met	Val	Ser	Arg	Asp	Gln	Ala	His	Leu	Gly	Pro	Lys	Tyr	Val	Gly	Leu
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Trp	Asp	Phe	Lys	Ser	Arg	Thr	Asp	Glu	Glu	Leu	Ser	Phe	Arg	Ala	Gly
		20						25					30		
Asp	Val	Phe	His	Val	Ala	Arg	Lys	Glu	Glu	Gln	Trp	Trp	Trp	Ala	Thr
		35					40					45			
Leu	Leu	Asp	Glu	Ala	Gly	Gly	Ala	Val	Ala	Gln	Gly	Tyr	Val	Pro	His
	50					55					60				
Asn	Tyr	Leu	Ala	Glu	Arg	Glu	Thr	Val	Glu	Ser	Glu	Pro	Trp	Phe	Phe
	65				70					75					80
Gly	Cys	Ile	Ser	Arg	Ser	Glu	Ala	Val	Arg	Arg	Leu	Gln	Ala	Glu	Gly
				85					90					95	
Asn	Ala	Thr	Gly	Ala	Phe	Leu	Ile	Arg	Val	Ser	Glu	Lys	Pro	Ser	Ala
			100					105					110		
Asp	Tyr	Val	Leu	Ser	Val	Arg	Asp	Thr	Gln	Ala	Val	Arg	His	Tyr	Lys
		115					120					125			
Ile	Trp	Arg	Arg	Ala	Gly	Gly	Arg	Leu	His	Leu	Asn	Glu	Ala	Val	Ser
	130					135					140				
Phe	Leu	Ser	Leu	Pro	Glu	Leu	Val	Asn	Tyr	His	Arg	Ala	Gln	Ser	Leu
	145				150					155					160
Ser	His	Gly	Leu	Arg	Leu	Ala	Ala	Pro	Cys	Arg	Lys	His	Glu	Pro	Glu
				165					170					175	
Pro	Leu	Pro	His	Trp	Asp	Asp	Trp	Glu	Arg	Pro	Arg	Glu	Glu	Phe	Thr
			180					185					190		
Leu	Cys	Arg	Lys	Leu	Gly	Ser	Gly	Tyr	Phe	Gly	Glu	Val	Phe	Glu	Gly
		195					200					205			
Leu	Trp	Lys	Asp	Arg	Val	Gln	Val	Ala	Ile	Lys	Val	Ile	Ser	Arg	Asp
	210					215					220				
Asn	Leu	Leu	His	Gln	Gln	Met	Leu	Gln	Ser	Glu	Ile	Gln	Ala	Met	Lys
	225				230					235					240
Lys	Leu	Arg	His	Lys	His	Ile	Leu	Ala	Leu	Tyr	Ala	Val	Val	Ser	Val
				245					250					255	
Gly	Asp	Pro	Val	Tyr	Ile	Ile	Thr	Glu	Leu	Met	Ala	Lys	Gly	Ser	Leu
		260						265					270		
Leu	Glu	Leu	Leu	Arg	Asp	Ser	Asp	Glu	Lys	Val	Leu	Pro	Val	Ser	Glu
		275					280					285			
Leu	Leu	Asp	Ile	Ala	Trp	Gln	Val	Ala	Glu	Gly	Met	Cys	Tyr	Leu	Glu
	290					295					300				

Ser Gln Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val
 305 310 315 320
 Gly Glu Asn Thr Leu Cys Lys Val Gly Asp Phe Gly Leu Ala Arg Leu
 325 330 335
 Ile Lys Glu Asp Val Tyr Leu Ser His Asp His Asn Ile Pro Tyr Lys
 340 345 350
 Trp Thr Ala Pro Glu Ala Leu Ser Arg Gly His Tyr Ser Thr Lys Ser
 355 360 365
 Asp Val Trp Ser Phe Gly Ile Leu Leu His Glu Met Phe Ser Arg Gly
 370 375 380
 Gln Val Pro Tyr Pro Gly Met Ser Asn His Glu Ala Phe Leu Arg Val
 385 390 395 400
 Asp Ala Gly Tyr Arg Met Pro Cys Pro Leu Glu Cys Pro Pro Ser Val
 405 410 415
 His Lys Leu Met Leu Thr Cys Trp Cys Arg Asp Pro Glu Gln Arg Pro
 420 425 430
 Cys Phe Lys Ala Leu Arg Glu Arg Leu Ser Ser Phe Thr Ser Tyr Glu
 435 440 445
 Asn Pro Thr
 450

<210> 82
 <211> 451
 <212> PRT
 <213> Mus musculus

<400> 82
 Met Val Ser Trp Asp Lys Ala His Leu Gly Pro Lys Tyr Val Gly Leu
 1 5 10 15
 Trp Asp Phe Lys Ala Arg Thr Asp Glu Glu Leu Ser Phe Gln Ala Gly
 20 25 30
 Asp Leu Leu His Val Thr Lys Lys Glu Glu Leu Trp Trp Trp Ala Thr
 35 40 45
 Leu Leu Asp Ala Glu Gly Lys Ala Leu Ala Glu Gly Tyr Val Pro His
 50 55 60
 Asn Tyr Leu Ala Glu Lys Glu Thr Val Glu Ser Glu Pro Trp Phe Phe
 65 70 75 80
 Gly Cys Ile Ser Arg Ser Glu Ala Met His Arg Leu Gln Ala Glu Asp
 85 90 95
 Asn Ser Lys Gly Ala Phe Leu Ile Arg Val Ser Gln Lys Pro Gly Ala

100					105					110					
Asp	Tyr	Val	Leu	Ser	Val	Arg	Asp	Ala	Gln	Ala	Val	Arg	His	Tyr	Arg
		115					120					125			
Ile	Trp	Lys	Asn	Asn	Glu	Gly	Arg	Leu	His	Leu	Asn	Glu	Ala	Val	Ser
	130					135					140				
Phe	Ser	Asn	Leu	Ser	Glu	Leu	Val	Asp	Tyr	His	Lys	Thr	Gln	Ser	Leu
145					150					155					160
Ser	His	Gly	Leu	Gln	Leu	Ser	Met	Pro	Cys	Trp	Lys	His	Lys	Thr	Glu
				165					170					175	
Pro	Leu	Pro	His	Trp	Asp	Asp	Trp	Glu	Arg	Pro	Arg	Glu	Glu	Phe	Thr
			180					185					190		
Leu	Cys	Lys	Lys	Leu	Gly	Ala	Gly	Tyr	Phe	Gly	Glu	Val	Phe	Glu	Ala
	195						200					205			
Leu	Trp	Lys	Gly	Gln	Val	His	Val	Ala	Val	Lys	Val	Ile	Ser	Arg	Asp
	210					215					220				
Asn	Leu	Leu	His	Gln	His	Thr	Phe	Gln	Ala	Glu	Ile	Gln	Ala	Met	Lys
225					230					235					240
Lys	Leu	Arg	His	Lys	His	Ile	Leu	Ser	Leu	Tyr	Ala	Val	Ala	Thr	Ala
				245					250					255	
Gly	Asp	Pro	Val	Tyr	Ile	Ile	Thr	Glu	Leu	Met	Pro	Lys	Gly	Asn	Leu
			260					265					270		
Leu	Gln	Leu	Leu	Arg	Asp	Ser	Asp	Glu	Lys	Ala	Leu	Pro	Ile	Leu	Glu
		275					280					285			
Leu	Val	Asp	Phe	Ala	Ser	Gln	Val	Ala	Glu	Gly	Met	Cys	Tyr	Leu	Glu
	290					295					300				
Ser	Gln	Asn	Tyr	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val
305					310					315					320
Thr	Glu	Asn	Asn	Leu	Cys	Lys	Val	Gly	Asp	Phe	Gly	Leu	Ala	Arg	Leu
				325				330						335	
Val	Lys	Glu	Asp	Ile	Tyr	Leu	Ser	His	Glu	His	Asn	Val	Pro	Tyr	Lys
			340					345					350		
Trp	Thr	Ala	Pro	Glu	Ala	Leu	Ser	Arg	Gly	His	Tyr	Ser	Ile	Lys	Ser
		355					360					365			
Asp	Val	Trp	Ser	Phe	Gly	Val	Leu	Leu	His	Glu	Ile	Phe	Ser	Arg	Gly
	370					375					380				
Gln	Met	Pro	Tyr	Pro	Gly	Met	Ser	Asn	His	Glu	Thr	Phe	Leu	Arg	Val
385					390					395					400
Asp	Ala	Gly	Tyr	Arg	Met	Pro	Cys	Pro	Leu	Glu	Cys	Pro	Pro	Asn	Ile

405	410	415
His Lys Leu Met Leu Ser Cys Trp Ser Arg Asp Pro Lys Gln Arg Pro		
420	425	430
Cys Phe Lys Asp Leu Cys Glu Lys Leu Thr Gly Ile Thr Arg Tyr Glu		
435	440	445
Asn Leu Val		
450		
<210> 83		
<211> 221		
<212> PRT		
<213> Homo sapiens		
<400> 83		
Met Leu Gln Ser Glu Ile Gln Ala Met Lys Lys Leu Arg His Lys His		
1	5	10
Ile Leu Ala Leu Tyr Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile		
20	25	30
Ile Thr Glu Leu Met Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp		
35	40	45
Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp		
50	55	60
Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His		
65	70	75
Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys		
85	90	95
Lys Val Gly Asp Phe Gly Leu Ala Arg Leu Ile Lys Glu Asp Val Tyr		
100	105	110
Leu Ser His Asp His Asn Ile Pro Tyr Lys Trp Thr Ala Pro Glu Ala		
115	120	125
Leu Ser Arg Gly His Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly		
130	135	140
Ile Leu Leu His Glu Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly		
145	150	155
Met Ser Asn His Glu Ala Phe Leu Arg Val Asp Ala Gly Tyr Arg Met		
165	170	175
Pro Cys Pro Leu Glu Cys Pro Pro Ser Val His Lys Leu Met Leu Thr		
180	185	190
Cys Trp Cys Arg Asp Pro Glu Gln Arg Pro Cys Phe Lys Ala Leu Arg		
195	200	205

Glu Arg Leu Ser Ser Phe Thr Ser Tyr Glu Asn Pro Thr
 210 215 220

<210> 84
 <211> 505
 <212> PRT
 <213> Spongilla lacustris

<400> 84
 Met Gly Ser Cys Cys Ser Ser Gln Asp Gly Asp Gly Asn Gly Lys Ala
 1 5 10 15
 Thr Ala Gly Ser Thr Val Asp Ser His Glu Leu Ser Gln Ser Val Lys
 20 25 30
 Gly Lys Ile Lys Gln Pro Glu Pro Lys Pro Lys Pro Pro Pro Gln Val
 35 40 45
 Pro Pro Ala Gln Asp Val Lys Tyr Pro Ile Tyr Val Gly Lys Tyr Asp
 50 55 60
 Tyr Asp Ser Arg Thr Asp Asp Asp Leu Ser Phe Lys Lys Gly Asp Leu
 65 70 75 80
 Met Tyr Ile Ile Ser Thr Asp Glu Gly Asp Trp Trp Phe Ala Arg Ser
 85 90 95
 Lys Asp Thr Ala Gly Lys Glu Gly Tyr Ile Pro Ser Asn Tyr Val Ala
 100 105 110
 Glu Tyr Lys Ser Leu Asp Ala Glu Glu Trp Phe Leu Gly Lys Ile Lys
 115 120 125
 Arg Val Glu Ala Glu Lys Met Leu Asn Gln Ser Phe Asn Gln Val Gly
 130 135 140
 Ser Phe Leu Ile Arg Asp Ser Glu Thr Thr Pro Gly Asp Phe Ser Leu
 145 150 155 160
 Ser Val Lys Asp Gln Asp Arg Val Arg His Tyr Arg Val Arg Arg Leu
 165 170 175
 Glu Asp Gly Ser Leu Phe Val Thr Arg Arg Ser Thr Phe Gln Ile Leu
 180 185 190
 His Glu Leu Val Asp His Tyr Lys Ile Glu Thr Asp Gly Leu Cys Cys
 195 200 205
 Lys Leu Leu Tyr Pro Cys Leu Gln Ala Glu Lys Pro Gln Thr Ala Gly
 210 215 220
 Leu Leu Arg Gln Ala Asn Glu Glu Trp Glu Ile Glu Lys Thr Gln Ile
 225 230 235 240
 Lys Leu Leu Arg Arg Leu Gly Ala Gly Gln Phe Gly Glu Val Trp Glu
 245 250 255

Gly Leu Trp Asn Gly Thr Thr Ser Val Ala Val Lys Thr Leu Lys Pro
 260 265 270
 Gly Thr Met Ser Val Glu Glu Phe Leu Gln Glu Ala Ser Ile Met Lys
 275 280 285
 Arg Leu Arg His Pro Lys Leu Ile Gln Leu Tyr Ala Val Cys Thr Lys
 290 295 300
 Glu Glu Pro Ile Tyr Ile Val Thr Glu Leu Met Lys Tyr Gly Ser Leu
 305 310 315 320
 Leu Glu Tyr Leu Arg Gly Glu Asp Gly Val Leu Lys Ile Glu Gln Leu
 325 330 335
 Val Asp Val Ala Ala Gln Val Ala Ser Gly Met Ser Tyr Leu Glu Gln
 340 345 350
 Gln Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly
 355 360 365
 Glu His Gly Ile Cys Lys Val Ala Asp Phe Gly Leu Ala Arg Val Ile
 370 375 380
 Asp Glu Glu Ile Tyr Glu Ala His Thr Gly Ala Lys Phe Pro Ile Lys
 385 390 395 400
 Trp Thr Ala Pro Glu Ala Ala Met Tyr Asn Arg Phe Thr Ile Lys Ser
 405 410 415
 Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Ile Ile Thr Tyr Gly
 420 425 430
 Arg Phe Pro Tyr Pro Gly Met Thr Asn Pro Glu Val Leu Glu Lys Ile
 435 440 445
 Gln Gln Asn Tyr Arg Met Pro Cys Pro Ala Asn Cys Pro Lys Gln Phe
 450 455 460
 His Asp Ile Met Leu Asp Cys Trp Arg Glu Asp Pro Ala Ser Arg Pro
 465 470 475 480
 Thr Phe Glu Thr Leu Gln Trp Gln Leu Glu Glu Phe Phe Asn Ser Glu
 485 490 495
 Gly Tyr Arg Asp Pro Asp Ala Ile His
 500 505

<210> 85

<211> 537

<212> PRT

<213> Xiphophorus helleri

<400> 85

Met Gly Cys Val Gln Cys Lys Asp Lys Glu Ala Thr Lys Leu Thr Asp

1	5	10	15
Asp Arg Asp Ala Ser Ile Ser Gln Gly Ala Gly Tyr Arg Tyr Gly Ala	20	25	30
Asp Pro Thr Pro Gln His Tyr Pro Ser Phe Gly Val Thr Ala Ile Pro	35	40	45
Asn Tyr Asn Asn Phe His Ala Pro Val Gly Gln Gly Val Thr Val Phe	50	55	60
Gly Gly Val Asn Thr Ser Ser His Thr Gly Thr Leu Arg Thr Arg Gly	65	70	75
Gly Thr Gly Val Thr Leu Phe Val Ala Leu Tyr Asp Tyr Glu Ala Arg	85	90	95
Thr Glu Asp Asp Leu Ser Phe Arg Lys Gly Glu Arg Phe Gln Ile Leu	100	105	110
Asn Ser Thr Glu Gly Asp Trp Trp Asp Ala Arg Ser Leu Thr Thr Gly	115	120	125
Gly Ser Gly Tyr Ile Pro Ser Asn Tyr Val Ala Pro Val Asp Ser Ile	130	135	140
Gln Ala Glu Asp Trp Tyr Phe Gly Lys Leu Gly Arg Lys Asp Ala Glu	145	150	155
Arg Gln Leu Leu Ser Thr Gly Asn Pro Arg Gly Thr Tyr Leu Ile Arg	165	170	175
Glu Ser Glu Thr Thr Lys Gly Ala Phe Ser Leu Ser Ile Arg Asp Trp	180	185	190
Asp Asp Glu Lys Gly Asp His Val Lys His Tyr Lys Ile Arg Lys Leu	195	200	205
Asp Ser Gly Gly Tyr Tyr Ile Thr Thr Arg Ala Gln Phe Asp Thr Leu	210	215	220
Gln Gln Leu Val Gln His Tyr Ser Asp Arg Ala Ala Gly Leu Cys Cys	225	230	235
Arg Leu Val Val Pro Cys His Lys Gly Met Pro Arg Leu Ala Asp Leu	245	250	255
Ser Val Lys Thr Lys Asp Val Trp Glu Ile Pro Arg Glu Ser Leu Gln	260	265	270
Leu Ile Lys Arg Leu Gly Asn Gly Gln Phe Gly Glu Val Trp Met Gly	275	280	285
Thr Trp Asn Gly Thr Thr Lys Val Ala Val Lys Thr Leu Lys Pro Gly	290	295	300
Thr Met Ser Pro Glu Ser Phe Leu Glu Glu Ala Gln Ile Met Lys Lys			

305		310		315		320
Leu Arg His Asp Lys	Leu Val Gln Leu Tyr	Ala Val Val Ser	Glu Glu			
	325		330			335
Pro Ile Tyr Ile Val Thr Glu Tyr Met Ser Lys Gly Ser Leu Leu Asp						
	340		345			350
Phe Leu Lys Asp Gly Glu Gly Arg Ala Leu Lys Leu Pro Asn Leu Val						
	355		360			365
Asp Met Ala Ala Gln Val Ala Ala Gly Met Ala Tyr Ile Glu Arg Met						
	370		375			380
Asn Tyr Ile His Arg Asp Leu Arg Ser Ala Asn Ile Leu Val Gly Asp						
	385		390			395
Asn Leu Val Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu						
		405		410		415
Asp Asn Glu Tyr Thr Ala Arg Gln Gly Ala Lys Phe Pro Ile Lys Trp						
	420		425			430
Thr Ala Pro Glu Ala Ala Leu Tyr Gly Arg Phe Thr Ile Lys Ser Asp						
	435		440			445
Val Trp Ser Phe Gly Ile Leu Leu Thr Glu Leu Val Thr Lys Gly Arg						
	450		455			460
Val Pro Tyr Pro Gly Met Asn Asn Arg Glu Val Leu Glu Gln Val Glu						
	465		470			475
Arg Gly Tyr Arg Met Pro Cys Pro Gln Asp Cys Pro Ala Ser Leu His						
	485		490			495
Glu Leu Met Leu Gln Cys Trp Lys Lys Asp Pro Glu Glu Arg Pro Thr						
	500		505			510
Phe Glu Tyr Leu Gln Ala Phe Leu Glu Asp Tyr Phe Thr Ala Thr Glu						
	515		520			525
Pro Gln Tyr Gln Pro Gly Asp Asn Leu						
	530		535			

<210> 86
 <211> 534
 <212> PRT
 <213> Homo sapiens

<400> 86
 Met Ile Ala Arg Gln Gln Cys Val Arg Gly Gly Pro Arg Gly Phe Ser
 1 5 10 15
 Cys Gly Ser Ala Ile Val Gly Gly Gly Lys Arg Gly Ala Phe Ser Ser
 20 25 30

Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
 50 55 60
 Val Ala Gly Ser Arg Gln Gly Ala Cys Phe Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Thr Gly Gly Phe Gly Ala Gly Gly Phe Gly Ala Gly Phe Gly Thr
 85 90 95
 Gly Gly Phe Gly Gly Gly Phe Gly Gly Ser Phe Ser Gly Lys Gly Gly
 100 105 110
 Pro Gly Phe Pro Val Leu Pro Ala Gly Gly Ile Gln Glu Val Thr Leu
 115 120 125
 Asn Gln Ser Leu Leu Thr Pro Leu His Val Glu Ile Asp Pro Glu Ile
 130 135 140
 Gln Lys Val Arg Thr Glu Glu Arg Glu Gln Ile Lys Leu Leu Asn Asn
 145 150 155 160
 Lys Phe Ala Ser Phe Ile Asp Lys Val Gln Phe Leu Glu Gln Gln Asn
 165 170 175
 Lys Val Leu Glu Thr Lys Trp Asn Leu Leu Gln Gln Gln Thr Thr Thr
 180 185 190
 Thr Ser Ser Lys Asn Leu Glu Pro Leu Phe Glu Thr Tyr Leu Ser Val
 195 200 205
 Leu Arg Lys Gln Leu Asp Thr Leu Gly Asn Asp Lys Gly Arg Leu Gln
 210 215 220
 Ser Glu Leu Lys Thr Met Gln Asp Ser Val Glu Asp Phe Lys Thr Lys
 225 230 235 240
 Tyr Glu Glu Glu Ile Asn Lys Arg Thr Ala Ala Glu Asn Asp Phe Val
 245 250 255
 Val Leu Lys Lys Asp Val Asp Ala Ala Tyr Leu Asn Lys Val Glu Leu
 260 265 270
 Glu Ala Lys Val Asp Ser Leu Asn Asp Glu Ile Asn Phe Leu Lys Val
 275 280 285
 Leu Tyr Asp Ala Glu Leu Ser Gln Met Gln Thr His Val Ser Asp Thr
 290 295 300
 Ser Val Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser
 305 310 315 320
 Ile Ile Ala Glu Val Arg Ala Gln Tyr Glu Glu Ile Ala Gln Arg Ser
 325 330 335

Lys Ala Glu Ala Glu Ala Leu Tyr Gln Thr Lys Val Gln Gln Leu Gln
 340 345 350
 Ile Ser Val Asp Gln His Gly Asp Asn Leu Lys Asn Thr Lys Ser Glu
 355 360 365
 Ile Ala Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile Glu
 370 375 380
 Asn Ile Lys Lys Gln Cys Gln Thr Leu Gln Val Ser Val Ala Asp Ala
 385 390 395 400
 Glu Gln Arg Gly Glu Asn Ala Leu Lys Asp Ala His Ser Lys Arg Val
 405 410 415
 Glu Leu Glu Ala Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met
 420 425 430
 Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile
 435 440 445
 Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Arg Met
 450 455 460
 Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ser Val Val Ser Gly Ser
 465 470 475 480
 Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly Ser Gly Phe
 485 490 495
 Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Phe Gly Phe
 500 505 510
 Gly Gly Ser Val Ser Gly Ser Ser Ser Lys Ile Ile Ser Thr Thr
 515 520 525
 Thr Leu Asn Lys Arg Arg
 530

<210> 87
 <211> 534
 <212> PRT
 <213> Homo sapiens

<400> 87
 Met Ile Ala Arg Gln Gln Cys Val Arg Gly Gly Pro Arg Gly Phe Ser
 1 5 10 15
 Cys Gly Ser Ala Ile Val Gly Gly Gly Lys Arg Gly Ala Phe Ser Ser
 20 25 30
 Val Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Arg Gly Asn Lys Ser Ile Ser Met Ser
 50 55 60

Val	Ala	Gly	Ser	Arg	Gln	Gly	Ala	Cys	Phe	Gly	Gly	Ala	Gly	Gly	Phe	
65					70				75						80	
Gly	Thr	Gly	Gly	Phe	Gly	Ala	Gly	Gly	Phe	Gly	Ala	Gly	Phe	Gly	Thr	
				85					90					95		
Gly	Gly	Phe	Gly	Gly	Gly	Phe	Gly	Gly	Ser	Phe	Ser	Gly	Lys	Gly	Gly	
			100					105					110			
Pro	Gly	Phe	Pro	Val	Leu	Pro	Ala	Gly	Gly	Ile	Gln	Glu	Val	Thr	Ile	
		115					120					125				
Asn	Gln	Ser	Leu	Leu	Thr	Pro	Leu	His	Val	Glu	Ile	Asp	Pro	Glu	Ile	
		130				135					140					
Gln	Lys	Val	Arg	Thr	Glu	Glu	Arg	Glu	Gln	Ile	Lys	Leu	Leu	Asn	Asn	
145					150					155					160	
Lys	Phe	Ala	Ser	Phe	Ile	Asp	Lys	Val	Gln	Phe	Leu	Glu	Gln	Gln	Asn	
				165					170					175		
Lys	Val	Leu	Glu	Thr	Lys	Trp	Asn	Leu	Leu	Gln	Gln	Gln	Thr	Thr	Thr	
		180						185					190			
Thr	Ser	Ser	Lys	Asn	Leu	Glu	Pro	Leu	Phe	Glu	Thr	Tyr	Leu	Ser	Val	
		195					200					205				
Leu	Arg	Lys	Gln	Leu	Asp	Thr	Leu	Gly	Asn	Asp	Lys	Gly	Arg	Leu	Gln	
	210					215					220					
Ser	Glu	Leu	Lys	Thr	Met	Gln	Asp	Ser	Val	Glu	Asp	Phe	Lys	Thr	Lys	
225					230					235					240	
Tyr	Glu	Glu	Glu	Ile	Asn	Lys	Arg	Thr	Ala	Ala	Glu	Asn	Asp	Phe	Val	
				245					250					255		
Val	Leu	Lys	Lys	Asp	Val	Asp	Ala	Ala	Tyr	Leu	Asn	Lys	Val	Glu	Leu	
			260					265					270			
Glu	Ala	Lys	Val	Asp	Ser	Leu	Asn	Asp	Glu	Ile	Asn	Phe	Leu	Lys	Val	
		275					280					285				
Leu	Tyr	Asp	Ala	Glu	Leu	Ser	Gln	Met	Gln	Thr	His	Val	Ser	Asp	Thr	
	290					295					300					
Ser	Val	Val	Leu	Ser	Met	Asp	Asn	Asn	Arg	Asn	Leu	Asp	Leu	Asp	Ser	
305					310				315						320	
Ile	Ile	Ala	Glu	Val	Arg	Ala	Gln	Tyr	Glu	Glu	Ile	Ala	Gln	Arg	Ser	
				325					330					335		
Lys	Ala	Glu	Ala	Glu	Ala	Leu	Tyr	Gln	Thr	Lys	Val	Gln	Gln	Leu	Gln	
			340					345					350			
Ile	Ser	Val	Asp	Gln	His	Gly	Asp	Asn	Leu	Lys	Asn	Thr	Lys	Ser	Glu	
		355					360					365				

Ile Ala Glu Leu Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile Glu
 370 375 380
 Asn Ile Lys Lys Gln Cys Gln Thr Leu Gln Val Ser Val Ala Asp Ala
 385 390 395 400
 Glu Gln Arg Gly Glu Asn Ala Leu Lys Asp Ala His Ser Lys Arg Val
 405 410 415
 Glu Leu Glu Ala Ala Leu Gln Gln Ala Lys Glu Glu Leu Ala Arg Met
 420 425 430
 Leu Arg Glu Tyr Gln Glu Leu Met Ser Val Lys Leu Ala Leu Asp Ile
 435 440 445
 Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Tyr Arg Met
 450 455 460
 Ser Gly Glu Cys Gln Ser Ala Val Ser Ile Ser Val Val Ser Gly Ser
 465 470 475 480
 Thr Ser Thr Gly Gly Ile Ser Gly Gly Leu Gly Ser Gly Ser Gly Phe
 485 490 495
 Gly Leu Ser Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Phe Gly Phe
 500 505 510
 Gly Gly Ser Val Ser Gly Ser Ser Ser Ser Lys Ile Ile Gly Thr Thr
 515 520 525
 Thr Leu Asn Lys Arg Arg
 530

<210> 88
 <211> 524
 <212> PRT
 <213> Homo sapiens

<400> 88
 Met Ile Ala Arg Gln Ser Ser Val Arg Gly Ala Ser Pro Gly Phe Thr
 1 5 10 15
 Ser Gly Ser Ala Ile Ala Gly Gly Val Lys Arg Val Ala Phe Ser Ser
 20 25 30
 Gly Ser Met Ser Gly Gly Ala Gly Arg Cys Ser Ser Gly Gly Phe Gly
 35 40 45
 Ser Arg Ser Leu Tyr Asn Leu Gly Gly His Lys Ser Ile Ser Met Ser
 50 55 60
 Val Ala Gly Ser Cys Gln Gly Gly Gly Tyr Gly Gly Ala Gly Gly Phe
 65 70 75 80
 Gly Val Gly Gly Tyr Gly Ala Gly Phe Gly Ala Gly Gly Phe Gly Gly

85										90					95						
Gly	Phe	Gly	Gly	Ser	Phe	Asn	Gly	Arg	Gly	Gly	Pro	Gly	Phe	Pro	Val						
			100					105					110								
Cys	Pro	Ala	Gly	Gly	Ile	Gln	Glu	Val	Thr	Ile	Asn	Gln	Ser	Leu	Leu						
		115					120					125									
Thr	Pro	Leu	Gln	Val	Glu	Ile	Asp	Pro	Glu	Ile	Gln	Lys	Ile	Arg	Thr						
		130				135					140										
Ala	Glu	Arg	Glu	Gln	Ile	Lys	Thr	Leu	Asn	Asn	Lys	Phe	Ala	Ser	Phe						
		145			150					155					160						
Ile	Asp	Lys	Val	Arg	Phe	Leu	Glu	Gln	Gln	Asn	Lys	Val	Leu	Glu	Thr						
				165					170					175							
Lys	Trp	Asn	Leu	Leu	Gln	Gln	Gln	Thr	Thr	Thr	Thr	Ser	Pro	Lys	Ser						
			180					185					190								
Leu	Asp	Pro	Phe	Phe	Glu	Thr	Tyr	Ile	Asn	Ala	Leu	Arg	Lys	Asn	Leu						
		195					200					205									
Asp	Thr	Leu	Ser	Asn	Asp	Lys	Gly	Arg	Leu	Gln	Ser	Glu	Leu	Lys	Met						
		210				215					220										
Met	Gln	Asp	Ser	Val	Glu	Asp	Phe	Lys	Thr	Lys	Tyr	Glu	Glu	Glu	Ile						
		225			230					235					240						
Asn	Lys	Arg	Thr	Ala	Ala	Glu	Asn	Asp	Phe	Val	Val	Leu	Lys	Lys	Asp						
				245					250					255							
Val	Asp	Ala	Ala	Tyr	Met	Ile	Lys	Val	Glu	Leu	Glu	Ala	Lys	Met	Glu						
			260					265					270								
Ser	Leu	Lys	Asp	Glu	Ile	Asn	Phe	Thr	Arg	Val	Leu	Tyr	Glu	Ala	Glu						
		275					280					285									
Leu	Ala	Gln	Met	Gln	Thr	His	Val	Ser	Asp	Thr	Ser	Val	Val	Leu	Ser						
		290				295					300										
Met	Asp	Asn	Asn	Arg	Asn	Leu	Asp	Leu	Asp	Gly	Ile	Ile	Ala	Glu	Val						
		305			310					315				320							
Arg	Ala	Gln	Tyr	Glu	Asp	Ile	Ala	Arg	Lys	Ser	Lys	Ala	Glu	Val	Glu						
			325						330					335							
Ser	Trp	Tyr	Gln	Ile	Lys	Val	Gln	Gln	Leu	Gln	Met	Ser	Ala	Asp	Gln						
			340					345					350								
His	Gly	Asp	Ser	Leu	Lys	Thr	Thr	Lys	Asn	Glu	Ile	Ser	Glu	Leu	Asn						
		355					360					365									
Arg	Met	Ile	Gln	Arg	Leu	Arg	Ala	Glu	Ile	Glu	Asn	Ile	Lys	Lys	Gln						
		370				375					380										
Ser	Gln	Thr	Pro	Gln	Ala	Ser	Val	Ala	Asp	Ala	Glu	Gln	Arg	Gly	Glu						

385		390		395		400
Leu Ala Leu Lys Asp	Ala Tyr Ser Lys Arg	Ala Glu Leu Glu Thr	Ala			
	405		410		415	
Leu Gln Lys Ala Lys Glu Asp	Leu Ala Arg Leu Leu Arg Asp	Tyr Gln				
	420		425		430	
Ala Leu Met Asn Val Lys Leu Ala Leu Asp	Val Glu Ile Ala Thr Tyr					
	435		440		445	
Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Met	Ser Gly Glu Cys Lys					
	450		455		460	
Ser Ala Val Ser Ile Ser Val Val Gly Gly Ser	Gln His Trp Arg Ser					
	465		470		475	480
Gly Leu Gly Leu Gly Ser Gly Phe Cys Ser Gly	Ser Gly Ser Gly Ser Gly Ser					
	485		490		495	
Gly Phe Gly Phe Gly Gly Gly Ile Tyr Gly Gly	Ser Gly Ser Lys Ile					
	500		505		510	
Thr Ser Ser Ala Thr Ile Thr Lys Arg Ser Pro Arg						
	515		520			

<210> 89
 <211> 551
 <212> PRT
 <213> Mus musculus

<400> 89
Met Ser Arg Gln Ser Ser Ile Thr Phe Gln Ser Gly Ser Arg Arg Gly
1 5 10 15
Phe Ser Thr Thr Ser Ala Ile Thr Pro Ala Ala Gly Arg Ser Arg Phe
20 25 30
Ser Ser Val Ser Val Ala Arg Ser Ala Ala Gly Ser Gly Gly Leu Gly
35 40 45
Arg Ile Ser Ser Ala Gly Ala Ser Phe Gly Ser Arg Ser Leu Tyr Asn
50 55 60
Leu Gly Gly Ala Lys Arg Val Ser Ile Asn Gly Cys Gly Ser Ser Cys
65 70 75 80
Arg Ser Gly Phe Gly Gly Arg Ala Ser Asn Gly Phe Gly Val Asn Ser
85 90 95
Gly Phe Gly Tyr Gly Gly Gly Val Gly Gly Gly Phe Ser Gly Pro Ser
100 105 110
Phe Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln
115 120 125

Ser	Leu	Leu	Thr	Pro	Leu	His	Leu	Gln	Ile	Asp	Pro	Thr	Ile	Gln	Arg	130	135	140	
Val	Arg	Ala	Glu	Glu	Arg	Glu	Gln	Ile	Lys	Thr	Leu	Asn	Asn	Lys	Phe	145	150	155	160
Ala	Ser	Phe	Ile	Asp	Lys	Val	Arg	Phe	Leu	Glu	Gln	Gln	Asn	Lys	Val	165	170	175	
Leu	Glu	Thr	Lys	Trp	Ala	Leu	Leu	Gln	Glu	Gln	Gly	Ser	Arg	Thr	Val	180	185	190	
Arg	Gln	Asn	Leu	Glu	Pro	Leu	Phe	Asp	Ser	Tyr	Thr	Ser	Glu	Leu	Arg	195	200	205	
Arg	Gln	Leu	Glu	Ser	Ile	Thr	Thr	Glu	Arg	Gly	Arg	Leu	Glu	Ala	Glu	210	215	220	
Leu	Arg	Asn	Met	Gln	Asp	Val	Val	Glu	Asp	Phe	Lys	Val	Arg	Tyr	Glu	225	230	235	240
Asp	Glu	Ile	Asn	Lys	Arg	Thr	Ala	Ala	Glu	Asn	Glu	Phe	Val	Ala	Leu	245	250	255	
Lys	Lys	Asp	Val	Asp	Ala	Ala	Tyr	Met	Asn	Lys	Val	Glu	Leu	Glu	Ala	260	265	270	
Lys	Val	Lys	Ser	Leu	Pro	Glu	Glu	Ile	Asn	Phe	Ile	His	Ser	Val	Phe	275	280	285	
Asp	Ala	Glu	Leu	Ser	Gln	Leu	Gln	Thr	Gln	Val	Gly	Asp	Thr	Ser	Val	290	295	300	
Val	Leu	Ser	Met	Asp	Asn	Asn	Arg	Asn	Leu	Asp	Leu	Asp	Ser	Ile	Ile	305	310	315	320
Ala	Glu	Val	Lys	Ala	Gln	Tyr	Glu	Asp	Ile	Ala	Asn	Arg	Ser	Arg	Ala	325	330	335	
Glu	Ala	Glu	Ser	Trp	Tyr	Gln	Thr	Lys	Tyr	Glu	Glu	Leu	Gln	Val	Thr	340	345	350	
Ala	Gly	Arg	His	Gly	Asp	Asp	Leu	Arg	Asn	Thr	Lys	Gln	Glu	Ile	Ser	355	360	365	
Glu	Met	Asn	Arg	Met	Ile	Gln	Arg	Leu	Arg	Ala	Glu	Ile	Asp	Ser	Val	370	375	380	
Lys	Lys	Gln	Cys	Ser	Ser	Leu	Gln	Thr	Ala	Ile	Ala	Asp	Ala	Glu	Gln	385	390	395	400
Arg	Gly	Glu	Leu	Ala	Leu	Lys	Asp	Ala	Arg	Ala	Lys	Leu	Val	Asp	Leu	405	410	415	
Glu	Glu	Ala	Leu	Gln	Lys	Ala	Lys	Gln	Asp	Met	Ala	Arg	Leu	Leu	Arg	420	425	430	

Glu Tyr Gln Glu Leu Met Asn Ile Lys Leu Ala Leu Asp Val Glu Ile
 435 440 445
 Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Ser Gly
 450 455 460
 Glu Gly Val Ser Pro Val Asn Ile Ser Val Val Thr Ser Thr Leu Ser
 465 470 475 480
 Ser Gly Tyr Gly Arg Gly Ser Ser Ile Gly Gly Gly Asn Leu Gly Leu
 485 490 495
 Gly Gly Gly Ser Gly Tyr Ser Phe Thr Thr Ser Gly Gly His Ser Leu
 500 505 510
 Gly Ala Gly Leu Gly Gly Ser Gly Phe Ser Ala Thr Ser Asn Arg Gly
 515 520 525
 Leu Gly Gly Ser Gly Ser Ser Val Lys Phe Val Ser Thr Thr Ser Ser
 530 535 540
 Ser Gln Lys Ser Tyr Thr His
 545 550

<210> 90
 <211> 551
 <212> PRT
 <213> Homo sapiens

<400> 90
 Met Ser Arg Gln Ser Ser Ile Thr Phe Gln Ser Gly Ser Arg Arg Gly
 1 5 10 15
 Phe Ser Thr Thr Ser Ala Ile Thr Pro Ala Ala Gly Arg Ser Arg Phe
 20 25 30
 Ser Ser Val Ser Val Ala Arg Ser Ala Ala Gly Ser Gly Gly Leu Gly
 35 40 45
 Arg Ile Ser Ser Ala Gly Ala Ser Phe Gly Ser Arg Ser Leu Tyr Asn
 50 55 60
 Leu Gly Gly Ala Lys Arg Val Ser Ile Asn Gly Cys Gly Ser Ser Cys
 65 70 75 80
 Arg Ser Gly Phe Gly Gly Arg Ala Ser Asn Gly Phe Gly Val Asn Ser
 85 90 95
 Gly Phe Gly Tyr Gly Gly Gly Val Gly Gly Gly Phe Ser Gly Pro Ser
 100 105 110
 Phe Pro Val Cys Pro Pro Gly Gly Ile Gln Glu Val Thr Val Asn Gln
 115 120 125
 Ser Leu Leu Thr Pro Leu His Leu Gln Ile Asp Pro Thr Ile Gln Arg
 130 135 140

Val Arg Ala Glu Glu Arg Glu Gln Ile Lys Thr Leu Asn Asn Lys Phe
 145 150 155 160
 Ala Ser Phe Ile Asp Lys Val Arg Phe Leu Glu Gln Gln Asn Lys Val
 165 170 175
 Leu Glu Thr Lys Trp Ala Leu Leu Gln Glu Gln Gly Ser Arg Thr Val
 180 185 190
 Arg Gln Asn Leu Glu Pro Leu Phe Asp Ser Tyr Thr Ser Glu Leu Arg
 195 200 205
 Arg Gln Leu Glu Ser Ile Thr Thr Glu Arg Gly Arg Leu Glu Ala Glu
 210 215 220
 Leu Arg Asn Met Gln Asp Val Val Glu Asp Phe Lys Val Arg Tyr Glu
 225 230 235 240
 Asp Glu Ile Asn Lys Arg Thr Ala Ala Glu Asn Glu Phe Val Ala Leu
 245 250 255
 Lys Lys Asp Val Asp Ala Ala Tyr Met Asn Lys Val Glu Leu Glu Ala
 260 265 270
 Lys Val Lys Ser Leu Pro Glu Glu Ile Asn Phe Ser His Ser Val Phe
 275 280 285
 Asp Ala Glu Leu Ser Gln Leu Gln Thr Gln Val Gly Asp Thr Ser Val
 290 295 300
 Val Leu Ser Met Asp Asn Asn Arg Asn Leu Asp Leu Asp Ser Ile Ile
 305 310 315 320
 Ala Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Asn Arg Ser Arg Ala
 325 330 335
 Glu Ala Glu Ser Trp Tyr Gln Thr Lys Tyr Glu Glu Leu Gln Val Thr
 340 345 350
 Ala Gly Arg His Gly Asp Asp Leu Arg Asn Thr Lys Gln Glu Ile Ser
 355 360 365
 Glu Met Asn Arg Met Ile Gln Arg Leu Arg Ala Glu Ile Asp Ser Val
 370 375 380
 Lys Lys Gln Cys Ser Ser Leu Gln Thr Ala Ile Ala Asp Ala Glu Gln
 385 390 395 400
 Arg Gly Glu Leu Ala Leu Lys Asp Ala Arg Ala Lys Leu Val Asp Leu
 405 410 415
 Glu Glu Ala Leu Gln Lys Ala Lys Gln Asp Met Ala Arg Leu Leu Arg
 420 425 430
 Glu Tyr Gln Glu Leu Met Asn Ile Lys Leu Ala Leu Asp Val Glu Ile
 435 440 445

Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Leu Ser Gly
450 455 460

Glu Gly Val Ser Pro Val Asn Ile Ser Val Val Thr Ser Thr Leu Ser
465 470 475 480

Ser Gly Tyr Gly Arg Gly Ser Ser Ile Gly Gly Gly Asn Leu Gly Leu
485 490 495

Gly Gly Gly Ser Gly Tyr Ser Phe Thr Thr Ser Gly Gly His Ser Leu
500 505 510

Gly Ala Gly Leu Gly Gly Ser Gly Phe Ser Ala Thr Ser Asn Arg Gly
515 520 525

Leu Gly Gly Ser Gly Ser Ser Val Lys Phe Val Ser Thr Thr Ser Ser
530 535 540

Ser Gln Lys Ser Tyr Thr His
545 550

<210> 91

<211> 599

<212> PRT

<213> Homo sapiens

<400> 91

Val Arg Asp Lys Thr Glu Glu Ser Cys Pro Ile Leu Arg Ile Glu Gly
1 5 10 15

His Gln Leu Thr Tyr Asp Asn Ile Asn Lys Leu Glu Val Ser Gly Phe
20 25 30

Asp Leu Gly Asp Ser Phe Ser Leu Arg Arg Ala Phe Cys Glu Ser Asp
35 40 45

Lys Thr Cys Phe Lys Leu Gly Ser Ala Leu Leu Ile Arg Asp Thr Ile
50 55 60

Lys Ile Phe Pro Lys Gly Leu Pro Glu Glu Tyr Ser Val Ala Ala Met
65 70 75 80

Phe Arg Val Arg Arg Asn Ala Lys Lys Glu Arg Trp Phe Leu Trp Gln
85 90 95

Val Leu Asn Gln Gln Asn Ile Pro Gln Ile Ser Ile Val Val Asp Gly
100 105 110

Gly Lys Lys Val Val Glu Phe Met Phe Gln Ala Thr Glu Gly Asp Val
115 120 125

Leu Asn Tyr Ile Phe Arg Asn Arg Glu Leu Arg Pro Leu Phe Asp Arg
130 135 140

Gln Trp His Lys Leu Gly Ile Ser Ile Gln Ser Gln Val Ile Ser Leu

145		150		155		160
Tyr Met Asp Cys	Asn Leu Ile Ala Arg Arg Gln Thr Asp Glu Lys Asp					
	165			170		175
Thr Val Asp Phe His Gly Arg Thr Val Ile Ala Thr Arg Ala Ser Asp						
	180			185		190
Gly Lys Pro Val Asp Ile Glu Leu His Gln Leu Lys Ile Tyr Cys Ser						
	195			200		205
Ala Asn Leu Ile Ala Gln Glu Thr Cys Cys Glu Ile Ser Asp Thr Lys						
	210			215		220
Cys Pro Glu Gln Asp Gly Phe Gly Asn Ile Ala Ser Ser Trp Val Thr						
	225			230		235
Ala His Ala Ser Lys Met Ser Ser Tyr Leu Pro Ala Lys Gln Glu Leu						
	245			250		255
Lys Asp Gln Cys Gln Cys Ile Pro Asn Lys Gly Glu Ala Gly Leu Pro						
	260			265		270
Gly Ala Pro Gly Ser Pro Gly Gln Lys Gly His Lys Gly Glu Pro Gly						
	275			280		285
Glu Asn Gly Leu His Gly Ala Pro Gly Phe Pro Gly Gln Lys Gly Glu						
	290			295		300
Gln Gly Phe Glu Gly Ser Lys Gly Glu Thr Gly Glu Lys Gly Glu Gln						
	305			310		315
Gly Glu Lys Gly Asp Pro Ala Leu Gly Cys Leu Asn Gly Glu Asn Gly						
	325			330		335
Leu Lys Gly Val Leu Gly Pro His Gly Pro Pro Gly Pro Lys Gly Glu						
	340			345		350
Lys Gly Asp Thr Gly Pro Pro Gly Pro Pro Ala Leu Pro Gly Ser Leu						
	355			360		365
Gly Ile Gln Gly Pro Gln Gly Pro Pro Gly Lys Glu Gly Gln Arg Gly						
	370			375		380
Arg Arg Gly Lys Thr Gly Pro Pro Gly Lys Pro Gly Pro Pro Gly Pro						
	385			390		395
Pro Gly Pro Pro Gly Ile Gln Gly Ile His Gln Thr Leu Gly Gly Asp						
	405			410		415
Asp Asn Lys Asp Asn Lys Gly Asn Asp Glu His Glu Ala Gly Gly Leu						
	420			425		430
Lys Gly Asp Lys Gly Glu Thr Gly Leu Pro Gly Phe Pro Gly Ser Val						
	435			440		445
Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Glu Pro Phe Thr Lys Gly						

450	455	460
Glu Lys Gly Asp Arg Gly	Glu Pro Gly Val Ile Gly Ser Gln Gly Val	
465	470	475 480
Lys Gly Glu Pro Gly Asp Pro Gly Pro Pro Gly Leu Ile Gly Ser Pro		
	485 490	495
Gly Leu Lys Gly Gln Gln Gly Ser Ala Gly Ser Met Gly Pro Arg Gly		
	500 505	510
Pro Pro Gly Asp Val Gly Leu Pro Gly Glu His Gly Ile Pro Gly Lys		
	515 520	525
Gln Gly Ile Lys Gly Glu Lys Gly Asp Pro Gly Gly Ile Ile Gly Pro		
	530 535	540
Pro Gly Leu Pro Gly Pro Lys Gly Glu Ala Gly Pro Pro Gly Lys Ser		
	545 550	555 560
Leu Pro Gly Glu Pro Gly Leu Asp Gly Asn Pro Gly Ala Pro Gly Pro		
	565 570	575
Arg Gly Pro Lys Gly Glu Arg Gly Leu Pro Gly Val His Gly Ser Pro		
	580 585	590
Gly Asp Ile Gly Gln Arg Asp		
	595	

<210> 92
 <211> 1142
 <212> PRT
 <213> Homo sapiens

<400> 92														
Met Arg Leu Thr Gly Pro Trp Lys Leu Trp Leu Trp Met Ser Ile Phe														
1			5				10						15	
Leu Leu Pro Ala Ser Thr Ser Val Thr Val Arg Asp Lys Thr Glu Glu														
		20				25						30		
Ser Cys Pro Ile Leu Arg Ile Glu Gly His Gln Leu Thr Tyr Asp Asn														
		35				40					45			
Ile Asn Lys Leu Glu Val Ser Gly Phe Asp Leu Gly Asp Ser Phe Ser														
		50				55				60				
Leu Arg Arg Ala Phe Cys Glu Ser Asp Lys Thr Cys Phe Lys Leu Gly														
		65				70				75				80
Ser Ala Leu Leu Ile Arg Asp Thr Ile Lys Ile Phe Pro Lys Gly Leu														
				85				90					95	
Pro Glu Glu Tyr Ser Val Ala Ala Met Phe Arg Val Arg Arg Asn Ala														
		100					105						110	

Lys Lys Glu Arg Trp Phe Leu Trp Gln Val Leu Asn Gln Gln Asn Ile
 115 120 125
 Pro Gln Ile Ser Ile Val Val Asp Gly Gly Lys Lys Val Val Glu Phe
 130 135 140
 Met Phe Gln Ala Thr Glu Gly Asp Val Leu Asn Tyr Ile Phe Arg Asn
 145 150 155 160
 Arg Glu Leu Arg Pro Leu Phe Asp Arg Gln Trp His Lys Leu Gly Ile
 165 170 175
 Ser Ile Gln Ser Gln Val Ile Ser Leu Tyr Met Asp Cys Asn Leu Ile
 180 185 190
 Ala Arg Arg Gln Thr Asp Glu Lys Asp Thr Val Asp Phe His Gly Arg
 195 200 205
 Thr Val Ile Ala Thr Arg Ala Ser Asp Gly Lys Pro Val Asp Ile Glu
 210 215 220
 Leu His Gln Leu Lys Ile Tyr Cys Ser Ala Asn Leu Ile Ala Gln Glu
 225 230 235 240
 Thr Cys Cys Glu Ile Ser Asp Thr Lys Cys Pro Glu Gln Asp Gly Phe
 245 250 255
 Gly Asn Ile Ala Ser Ser Trp Val Thr Ala His Ala Ser Lys Met Ser
 260 265 270
 Ser Tyr Leu Pro Ala Lys Leu Glu Leu Lys Asp Gln Cys Gln Cys Ile
 275 280 285
 Pro Asn Lys Gly Glu Ala Gly Leu Pro Gly Ala Pro Gly Ser Pro Gly
 290 295 300
 Gln Lys Gly His Lys Gly Glu Pro Gly Glu Asn Gly Leu His Gly Ala
 305 310 315 320
 Pro Gly Phe Pro Gly Gln Lys Gly Glu Gln Gly Phe Glu Gly Ser Lys
 325 330 335
 Gly Glu Thr Gly Glu Lys Gly Glu Gln Gly Glu Lys Gly Asp Pro Ala
 340 345 350
 Leu Ala Gly Leu Asn Gly Glu Asn Gly Leu Lys Gly Val Leu Gly Pro
 355 360 365
 His Gly Pro Pro Gly Pro Lys Gly Glu Lys Gly Asp Thr Gly Pro Pro
 370 375 380
 Gly Pro Pro Ala Leu Pro Gly Ser Leu Gly Ile Gln Gly Pro Gln Gly
 385 390 395 400
 Pro Pro Gly Lys Glu Gly Gln Arg Gly Arg Arg Gly Lys Thr Gly Pro
 405 410 415

Pro Gly Lys Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Ile Gln
 420 425 430
 Gly Ile His Gln Thr Leu Gly Gly Asp Asp Asn Lys Asp Asn Lys Gly
 435 440 445
 Asn Asp Glu His Glu Ala Gly Gly Leu Lys Gly Asp Lys Gly Glu Thr
 450 455 460
 Gly Leu Pro Gly Phe Pro Gly Ser Val Gly Pro Lys Gly Gln Lys Gly
 465 470 475 480
 Glu Pro Gly Glu Pro Phe Thr Lys Gly Glu Lys Gly Asp Arg Gly Glu
 485 490 495
 Pro Gly Val Ile Gly Ser Gln Gly Val Lys Gly Glu Pro Gly Asp Pro
 500 505 510
 Gly Pro Pro Gly Leu Ile Gly Ser Pro Gly Leu Lys Gly Gln Gln Gly
 515 520 525
 Ser Ala Gly Ser Met Gly Pro Arg Gly Pro Pro Gly Asp Val Gly Leu
 530 535 540
 Pro Gly Glu His Gly Ile Pro Gly Lys Gln Gly Ile Lys Gly Glu Lys
 545 550 555 560
 Gly Asp Pro Gly Gly Ile Ile Gly Pro Pro Gly Leu Pro Gly Pro Lys
 565 570 575
 Gly Glu Ala Gly Pro Pro Gly Lys Ser Leu Pro Gly Glu Pro Gly Leu
 580 585 590
 Asp Gly Asn Pro Gly Ala Pro Gly Pro Arg Gly Pro Lys Gly Glu Arg
 595 600 605
 Gly Leu Pro Gly Val His Gly Ser Pro Gly Asp Ile Gly Pro Gln Gly
 610 615 620
 Ile Gly Ile Pro Gly Arg Thr Gly Ala Gln Gly Pro Ala Gly Glu Pro
 625 630 635 640
 Gly Ile Gln Gly Pro Arg Gly Leu Pro Gly Leu Pro Gly Thr Pro Gly
 645 650 655
 Thr Pro Gly Asn Asp Gly Val Pro Gly Arg Asp Gly Lys Pro Gly Leu
 660 665 670
 Pro Gly Pro Pro Gly Asp Pro Ile Ala Leu Pro Leu Leu Gly Asp Ile
 675 680 685
 Gly Ala Leu Leu Lys Asn Phe Cys Gly Asn Cys Gln Ala Ser Val Pro
 690 695 700
 Gly Leu Lys Ser Asn Lys Gly Glu Glu Gly Gly Ala Gly Glu Pro Gly
 705 710 715 720

Lys Tyr Asp Ser Met Ala Arg Lys Gly Asp Ile Gly Pro Arg Gly Pro
 725 730 735
 Pro Gly Ile Pro Gly Arg Glu Gly Pro Lys Gly Ser Lys Gly Glu Arg
 740 745 750
 Gly Tyr Pro Gly Ile Pro Gly Glu Lys Gly Asp Glu Gly Leu Gln Gly
 755 760 765
 Ile Pro Gly Ile Pro Gly Ala Pro Gly Pro Thr Gly Pro Pro Gly Leu
 770 775 780
 Met Gly Arg Thr Gly His Pro Gly Pro Thr Gly Ala Lys Gly Glu Lys
 785 790 795 800
 Gly Ser Asp Gly Pro Pro Gly Lys Pro Gly Pro Pro Gly Pro Pro Gly
 805 810 815
 Ile Pro Phe Asn Glu Arg Asn Gly Met Ser Ser Leu Tyr Lys Ile Lys
 820 825 830
 Gly Gly Val Asn Val Pro Ser Tyr Pro Gly Pro Pro Gly Pro Pro Gly
 835 840 845
 Pro Lys Gly Asp Pro Gly Pro Val Gly Glu Pro Gly Ala Met Gly Leu
 850 855 860
 Pro Gly Leu Glu Gly Phe Pro Gly Val Lys Gly Asp Arg Gly Pro Ala
 865 870 875 880
 Gly Pro Pro Gly Ile Ala Gly Met Ser Gly Lys Pro Gly Ala Pro Gly
 885 890 895
 Pro Pro Gly Val Pro Gly Glu Pro Gly Glu Arg Gly Pro Val Gly Asp
 900 905 910
 Ile Gly Phe Pro Gly Pro Glu Gly Pro Ser Gly Lys Pro Gly Ile Asn
 915 920 925
 Gly Lys Asp Gly Ile Pro Gly Ala Glu Gly Ile Met Gly Lys Pro Gly
 930 935 940
 Asp Arg Gly Pro Lys Gly Glu Arg Gly Asp Gln Gly Ile Pro Gly Asp
 945 950 955 960
 Arg Gly Ser Gln Gly Glu Arg Gly Lys Pro Gly Leu Thr Gly Met Lys
 965 970 975
 Gly Ala Ile Gly Pro Met Gly Pro Pro Gly Asn Lys Gly Ser Met Gly
 980 985 990
 Ser Pro Gly His Gln Gly Pro Pro Gly Ser Pro Gly Ile Pro Gly Ile
 995 1000 1005
 Pro Ala Asp Ala Val Ser Phe Glu Glu Ile Lys Lys Tyr Ile Asn Gln
 1010 1015 1020

Glu Val Leu Arg Ile Phe Glu Glu Arg Met Ala Val Phe Leu Ser Gln
 1025 1030 1035 1040
 Leu Lys Leu Pro Ala Ala Met Leu Ala Ala Gln Ala Tyr Gly Arg Pro
 1045 1050 1055
 Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Pro Gly Asp Pro Gly
 1060 1065 1070
 Pro Gln Gly Tyr Arg Gly Gln Lys Gly Glu Arg Gly Glu Pro Gly Ile
 1075 1080 1085
 Gly Leu Pro Gly Ser Pro Gly Leu Pro Gly Thr Ser Ala Leu Gly Leu
 1090 1095 1100
 Pro Gly Ser Pro Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Pro Ser
 1105 1110 1115 1120
 Gly Arg Cys Asn Pro Glu Asp Cys Leu Tyr Pro Val Ser His Ala His
 1125 1130 1135
 Gln Arg Thr Gly Gly Asn
 1140

<210> 93
 <211> 1142
 <212> PRT
 <213> Homo sapiens

<400> 93
 Met Arg Leu Thr Gly Pro Trp Lys Leu Trp Leu Trp Met Ser Ile Phe
 1 5 10 15
 Leu Leu Pro Ala Ser Thr Ser Val Thr Val Arg Asp Lys Thr Glu Glu
 20 25 30
 Ser Cys Pro Ile Leu Arg Ile Glu Gly His Gln Leu Thr Tyr Asp Asn
 35 40 45
 Ile Asn Lys Leu Glu Val Ser Gly Phe Asp Leu Gly Asp Ser Phe Ser
 50 55 60
 Leu Arg Arg Ala Phe Cys Glu Ser Asp Lys Thr Cys Phe Lys Leu Gly
 65 70 75 80
 Ser Ala Leu Leu Ile Arg Asp Thr Ile Lys Ile Phe Pro Lys Gly Leu
 85 90 95
 Pro Glu Glu Tyr Ser Val Ala Ala Met Phe Arg Val Arg Arg Asn Ala
 100 105 110
 Lys Lys Glu Arg Trp Phe Leu Trp Gln Val Leu Asn Gln Gln Asn Ile
 115 120 125
 Pro Gln Ile Ser Ile Val Val Asp Gly Gly Lys Lys Val Val Glu Phe
 130 135 140

Met	Phe	Gln	Ala	Thr	Glu	Gly	Asp	Val	Leu	Asn	Tyr	Ile	Phe	Arg	Asn	
145					150					155					160	
Arg	Glu	Leu	Arg	Pro	Leu	Phe	Asp	Arg	Gln	Trp	His	Lys	Leu	Gly	Ile	
				165					170					175		
Ser	Ile	Gln	Ser	Gln	Val	Ile	Ser	Leu	Tyr	Met	Asp	Cys	Asn	Leu	Ile	
			180					185					190			
Ala	Arg	Arg	Gln	Thr	Asp	Glu	Lys	Asp	Thr	Val	Asp	Phe	His	Gly	Arg	
		195					200					205				
Thr	Val	Ile	Ala	Thr	Arg	Ala	Ser	Asp	Gly	Lys	Pro	Val	Asp	Ile	Glu	
	210					215					220					
Leu	His	Gln	Leu	Lys	Ile	Tyr	Cys	Ser	Ala	Asn	Leu	Ile	Ala	Gln	Glu	
225					230					235					240	
Thr	Cys	Cys	Glu	Ile	Ser	Asp	Thr	Lys	Cys	Pro	Glu	Gln	Asp	Gly	Phe	
			245						250					255		
Gly	Asn	Ile	Ala	Ser	Ser	Trp	Val	Thr	Ala	His	Ala	Ser	Lys	Met	Ser	
			260					265						270		
Ser	Tyr	Leu	Pro	Ala	Lys	Gln	Glu	Leu	Lys	Asp	Gln	Cys	Gln	Cys	Ile	
		275					280					285				
Pro	Asn	Lys	Gly	Glu	Ala	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Ser	Pro	Gly	
	290					295					300					
Gln	Lys	Gly	His	Lys	Gly	Glu	Pro	Gly	Glu	Asn	Gly	Leu	His	Gly	Ala	
305					310					315					320	
Pro	Gly	Phe	Pro	Gly	Gln	Lys	Gly	Glu	Gln	Gly	Phe	Glu	Gly	Ser	Lys	
				325					330					335		
Gly	Glu	Thr	Gly	Glu	Lys	Gly	Glu	Gln	Gly	Glu	Lys	Gly	Asp	Pro	Ala	
			340					345					350			
Leu	Ala	Gly	Leu	Asn	Gly	Glu	Asn	Gly	Leu	Lys	Gly	Asp	Leu	Gly	Pro	
		355					360					365				
His	Gly	Pro	Pro	Gly	Pro	Lys	Gly	Glu	Lys	Gly	Asp	Thr	Gly	Pro	Pro	
	370					375					380					
Gly	Pro	Pro	Ala	Leu	Pro	Gly	Ser	Leu	Gly	Ile	Gln	Gly	Pro	Gln	Gly	
385					390					395				400		
Pro	Pro	Gly	Lys	Glu	Gly	Gln	Arg	Gly	Arg	Arg	Gly	Lys	Thr	Gly	Pro	
				405					410					415		
Pro	Gly	Lys	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ile	Gln	
		420					425						430			
Gly	Ile	His	Gln	Thr	Leu	Gly	Gly	Tyr	Tyr	Asn	Lys	Asp	Asn	Lys	Gly	
		435					440					445				

Asn Asp Glu His Glu Ala Gly Gly Leu Lys Gly Asp Lys Gly Glu Thr
 450 455 460
 Gly Leu Pro Gly Phe Pro Gly Ser Val Gly Pro Lys Gly Gln Lys Gly
 465 470 475 480
 Glu Pro Gly Glu Pro Phe Thr Lys Gly Glu Lys Gly Asp Arg Gly Glu
 485 490 495
 Pro Gly Val Ile Gly Ser Gln Gly Val Lys Gly Glu Pro Gly Asp Pro
 500 505 510
 Gly Pro Pro Gly Leu Ile Gly Ser Pro Gly Leu Lys Gly Gln Gln Gly
 515 520 525
 Ser Ala Gly Ser Met Gly Pro Arg Gly Pro Pro Gly Asp Val Gly Leu
 530 535 540
 Pro Gly Glu His Gly Ile Pro Gly Lys Gln Gly Ile Lys Gly Glu Lys
 545 550 555 560
 Gly Asp Pro Gly Gly Ile Ile Gly Pro Pro Gly Leu Pro Gly Pro Lys
 565 570 575
 Gly Glu Ala Gly Pro Pro Gly Lys Ser Leu Pro Gly Glu Pro Gly Leu
 580 585 590
 Asp Gly Asn Pro Gly Ala Pro Gly Pro Arg Gly Pro Lys Gly Glu Arg
 595 600 605
 Gly Leu Pro Gly Val His Gly Ser Pro Gly Asp Ile Gly Pro Gln Gly
 610 615 620
 Ile Gly Ile Pro Gly Arg Thr Gly Ala Gln Gly Pro Ala Gly Glu Pro
 625 630 635 640
 Gly Ile Gln Gly Pro Arg Gly Leu Pro Gly Leu Pro Gly Thr Pro Gly
 645 650 655
 Thr Pro Gly Asn Asp Gly Val Pro Gly Arg Asp Gly Lys Pro Gly Leu
 660 665 670
 Pro Gly Pro Pro Gly Asp Pro Ile Ala Leu Pro Leu Leu Gly Asp Ile
 675 680 685
 Gly Ala Leu Leu Lys Asn Phe Cys Gly Asn Cys Gln Ala Ser Val Pro
 690 695 700
 Gly Leu Lys Ser Asn Lys Gly Glu Glu Gly Gly Ala Gly Glu Pro Gly
 705 710 715 720
 Lys Tyr Asp Ser Met Ala Arg Lys Gly Asp Ile Gly Pro Arg Gly Pro
 725 730 735
 Pro Gly Ile Pro Gly Arg Glu Gly Pro Lys Gly Ser Lys Gly Glu Arg
 740 745 750

Gly Tyr Pro Gly Ile Pro Gly Glu Lys Gly Asp Glu Gly Leu Gln Gly
 755 760 765
 Ile Pro Gly Ile Pro Gly Ala Pro Gly Pro Thr Gly Pro Pro Gly Leu
 770 775 780
 Met Gly Arg Thr Gly His Pro Gly Pro Thr Gly Ala Lys Gly Glu Lys
 785 790 795 800
 Gly Ser Asp Gly Pro Pro Gly Lys Pro Gly Pro Pro Gly Pro Pro Gly
 805 810 815
 Ile Pro Phe Asn Glu Arg Asn Gly Met Ser Ser Leu Tyr Lys Ile Lys
 820 825 830
 Gly Gly Val Asn Val Pro Ser Tyr Pro Gly Pro Pro Gly Pro Pro Gly
 835 840 845
 Pro Lys Gly Asp Pro Gly Pro Val Gly Glu Pro Gly Ala Met Gly Leu
 850 855 860
 Pro Gly Leu Glu Gly Phe Pro Gly Val Lys Gly Asp Arg Gly Pro Ala
 865 870 875 880
 Gly Pro Pro Gly Ile Ala Gly Met Ser Gly Lys Pro Gly Ala Pro Gly
 885 890 895
 Pro Pro Gly Val Pro Gly Glu Pro Gly Glu Arg Gly Pro Val Gly Asp
 900 905 910
 Ile Gly Phe Pro Gly Pro Glu Gly Pro Ser Gly Lys Pro Gly Ile Asn
 915 920 925
 Gly Lys Asp Gly Ile Pro Gly Ala Gln Gly Ile Met Gly Lys Pro Gly
 930 935 940
 Asp Arg Gly Pro Lys Gly Glu Arg Gly Asp Gln Gly Ile Pro Gly Asp
 945 950 955 960
 Arg Gly Ser Gln Gly Glu Arg Gly Lys Pro Gly Leu Thr Gly Met Lys
 965 970 975
 Gly Ala Ile Gly Pro Met Gly Pro Pro Gly Asn Lys Gly Ser Met Gly
 980 985 990
 Ser Pro Gly His Gln Gly Pro Pro Gly Ser Pro Gly Ile Pro Gly Ile
 995 1000 1005
 Pro Ala Asp Ala Val Ser Phe Glu Glu Ile Lys Lys Tyr Ile Asn Gln
 1010 1015 1020
 Glu Val Leu Arg Ile Phe Glu Glu Arg Met Ala Val Phe Leu Ser Gln
 1025 1030 1035 1040
 Leu Lys Leu Pro Ala Ala Met Leu Ala Ala Gln Ala Tyr Gly Arg Pro
 1045 1050 1055

Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Pro Gly Asp Pro Gly
 1060 1065 1070

Pro Gln Gly Tyr Arg Gly Gln Lys Gly Glu Arg Gly Glu Pro Gly Ile
 1075 1080 1085

Gly Leu Pro Gly Ser Pro Gly Leu Pro Gly Thr Ser Ala Leu Gly Leu
 1090 1095 1100

Pro Gly Ser Pro Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Pro Ser
 1105 1110 1115 1120

Gly Arg Cys Asn Pro Glu Asp Cys Leu Tyr Pro Val Ser His Ala His
 1125 1130 1135

Gln Arg Thr Gly Gly Asn
 1140

<210> 94

<211> 913

<212> PRT

<213> Homo sapiens

<400> 94

Met Arg Leu Thr Gly Pro Trp Lys Leu Trp Leu Trp Met Ser Ile Phe
 1 5 10 15

Leu Leu Pro Ala Ser Thr Ser Val Thr Val Arg Asp Lys Thr Glu Glu
 20 25 30

Ser Cys Pro Ile Leu Arg Ile Glu Gly His Gln Leu Thr Tyr Asp Asn
 35 40 45

Ile Asn Lys Leu Glu Val Ser Gly Phe Asp Leu Gly Asp Ser Phe Ser
 50 55 60

Leu Arg Arg Ala Phe Cys Glu Ser Asp Lys Thr Cys Phe Lys Leu Gly
 65 70 75 80

Ser Ala Leu Leu Ile Arg Asp Thr Met Tyr Lys Ile Phe Pro Lys Gly
 85 90 95

Leu Pro Glu Glu Tyr Ser Val Ala Ala Met Phe Arg Val Arg Arg Asn
 100 105 110

Ala Lys Lys Glu Arg Trp Phe Leu Trp Gln Val Leu Asn Gln Gln Asn
 115 120 125

Ile Pro Gln Ile Ser Ile Val Val Asp Gly Gly Lys Lys Val Val Glu
 130 135 140

Phe Met Phe Gln Ala Thr Glu Gly Asp Val Leu Asn Tyr Ile Phe Arg
 145 150 155 160

Asn Arg Glu Leu Arg Pro Leu Phe Asp Arg Gln Trp His Lys Leu Gly

465	470	475	480
Gly Glu Pro Gly	Glu Pro Phe Thr Lys	Gly Glu Lys Gly	Asp Arg Gly
	485	490	495
Glu Pro Gly Val	Ile Gly Ser Gln	Gly Val Lys Gly	Glu Pro Gly Asp
	500	505	510
Pro Gly Pro Pro	Gly Leu Ile Gly	Ser Pro Gly Leu	Lys Gly Gln Gln
	515	520	525
Gly Ser Ala Gly	Ser Met Gly Pro	Arg Gly Pro Pro	Gly Asp Val Gly
	530	535	540
Leu Pro Gly Glu	His Gly Ile Pro	Gly Lys Gln Gly	Ile Lys Gly Glu
	545	550	555
Lys Gly Asp Pro	Gly Gly Ile Ile	Gly Pro Pro Gly	Leu Pro Gly Pro
	565	570	575
Lys Gly Glu Ala	Gly Pro Pro Gly	Lys Ser Leu Pro	Gly Glu Pro Gly
	580	585	590
Leu Asp Gly Asn	Pro Gly Ala Pro	Gly Pro Arg Gly	Pro Lys Gly Glu
	595	600	605
Arg Gly Leu Pro	Gly Val His Gly	Ser Pro Gly Asp	Ile Gly Pro Gln
	610	615	620
Gly Ile Gly Ile	Pro Gly Arg Thr	Gly Ala Gln Gly	Pro Ala Gly Glu
	625	630	635
Pro Gly Ile Gln	Gly Pro Arg Gly	Leu Pro Gly Leu	Pro Gly Thr Pro
	645	650	655
Gly Thr Pro Gly	Asn Asp Gly Val	Pro Gly Arg Asp	Gly Lys Pro Gly
	660	665	670
Leu Pro Gly Pro	Pro Gly Asp Pro	Ile Ala Leu Pro	Leu Leu Gly Asp
	675	680	685
Ile Gly Ala Leu	Leu Lys Asn Phe	Cys Gly Asn Cys	Gln Ala Ser Val
	690	695	700
Pro Gly Leu Lys	Ser Asn Lys Gly	Glu Glu Gly Gly	Ala Gly Glu Pro
	705	710	715
Gly Lys Tyr Asp	Ser Met Ala Arg	Lys Gly Asp Ile	Gly Pro Arg Gly
	725	730	735
Pro Pro Gly Ile	Pro Gly Arg Glu	Gly Pro Lys Gly	Ser Lys Gly Glu
	740	745	750
Arg Gly Tyr Pro	Gly Ile Pro Gly	Glu Lys Gly Asp	Glu Gly Leu Gln
	755	760	765
Gly Ile Pro Gly	Ile Pro Gly Ala	Pro Gly Pro Thr	Gly Pro Pro Gly

Pro Pro Gly Lys Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Ile
 420 425 430
 Gln Gly Ile His Gln Thr Leu Gly Gly Tyr Tyr Asn Lys Asp Asn Lys
 435 440 445
 Gly Asn Asp Glu His Glu Ala Gly Gly Leu Lys Gly Asp Lys Gly Glu
 450 455 460
 Thr Gly Leu Pro Gly Phe Pro Gly Ser Val Gly Pro Lys Gly Gln Lys
 465 470 475 480
 Gly Glu Pro Gly Glu Pro Phe Thr Lys Gly Glu Lys Gly Asp Arg Gly
 485 490 495
 Glu Pro Gly Val Ile Gly Ser Gln Gly Val Lys Gly Glu Pro Gly Asp
 500 505 510
 Pro Gly Pro Pro Gly Leu Ile Gly Ser Pro Gly Leu Lys Gly Gln Gln
 515 520 525
 Gly Ser Ala Gly Ser Met Gly Pro Arg Gly Pro Pro Gly Asp Val Gly
 530 535 540
 Leu Pro Gly Glu His Gly Ile Pro Gly Lys Gln Gly Ile Lys Gly Glu
 545 550 555 560
 Lys Gly Asp Pro Gly Gly Ile Ile Gly Pro Pro Gly Leu Pro Gly Pro
 565 570 575
 Lys Gly Glu Ala Gly Pro Pro Gly Lys Ser Leu Pro Gly Glu Pro Gly
 580 585 590
 Leu Asp Gly Asn Pro Gly Ala Pro Gly Pro Arg Gly Pro Lys Gly Glu
 595 600 605
 Arg Gly Leu Pro Gly Val His Gly Ser Pro Gly Asp Ile Gly Pro Gln
 610 615 620
 Gly Ile Gly Ile Pro Gly Arg Thr Gly Ala Gln Gly Pro Ala Gly Glu
 625 630 635 640
 Pro Gly Ile Gln Gly Pro Arg Gly Leu Pro Gly Leu Pro Gly Thr Pro
 645 650 655
 Gly Thr Pro Gly Asn Asp Gly Val Pro Gly Arg Asp Gly Lys Pro Gly
 660 665 670
 Leu Pro Gly Pro Pro Gly Asp Pro Ile Ala Leu Pro Leu Leu Gly Asp
 675 680 685
 Ile Gly Ala Leu Leu Lys Asn Phe Cys Gly Asn Cys Gln Ala Ser Val
 690 695 700
 Pro Gly Leu Lys Ser Asn Lys Gly Glu Glu Gly Gly Ala Gly Glu Pro
 705 710 715 720

Gly Lys Tyr Asp Ser Met Ala Arg Lys Gly Asp Ile Gly Pro Arg Gly
 725 730 735
 Pro Pro Gly Ile Pro Gly Arg Glu Gly Pro Lys Gly Ser Lys Gly Glu
 740 745 750
 Arg Gly Tyr Pro Gly Ile Pro Gly Glu Lys Gly Asp Glu Gly Leu Gln
 755 760 765
 Gly Ile Pro Gly Ile Pro Gly Ala Pro Gly Pro Thr Gly Pro Pro Gly
 770 775 780
 Leu Met Gly Arg Thr Gly His Pro Gly Pro Thr Gly Ala Lys Gly Glu
 785 790 795 800
 Lys Gly Ser Asp Gly Pro Pro Gly Lys Pro Gly Pro Pro Gly Pro Pro
 805 810 815
 Gly Ile Pro Phe Asn Glu Arg Asn Gly Met Ser Ser Leu Tyr Lys Ile
 820 825 830
 Lys Gly Gly Val Asn Val Pro Ser Tyr Pro Gly Pro Pro Gly Pro Pro
 835 840 845
 Gly Pro Lys Gly Asp Pro Gly Pro Val Gly Glu Pro Gly Ala Met Gly
 850 855 860
 Leu Pro Gly Leu Glu Gly Phe Pro Gly Val Lys Gly Asp Arg Gly Pro
 865 870 875 880
 Ala Gly Pro Pro Gly Ile Ala Gly Met Ser Gly Lys Pro Gly Ala Pro
 885 890 895
 Gly Pro Pro Gly Val Pro Gly Glu Pro Gly Glu Arg Gly Pro Val Gly
 900 905 910
 Asp Ile Gly Phe Pro Gly Pro Glu Gly Pro Ser Gly Lys Pro Gly Ile
 915 920 925
 Asn Gly Lys Asp Gly Ile Pro Gly Ala Gln Gly Ile Met Gly Lys Pro
 930 935 940
 Gly Asp Arg Gly Pro Lys Gly Glu Arg Gly Asp Gln Gly Ile Pro Gly
 945 950 955 960
 Asp Arg Gly Ser Gln Gly Glu Arg Gly Lys Pro Gly Leu Thr Gly Met
 965 970 975
 Lys Gly Ala Ile Gly Pro Met Gly Pro Pro Gly Asn Lys Gly Ser Met
 980 985 990
 Gly Ser Pro Gly His Gln Gly Pro Pro Gly Ser Pro Gly Ile Pro Gly
 995 1000 1005
 Ile Pro Ala Asp Ala Val Ser Phe Glu Glu Ile Lys Lys Tyr Ile Asn
 1010 1015 1020

Gln Glu Val Leu Arg Ile Phe Glu Glu Arg Met Ala Val Phe Leu Ser
 1025 1030 1035 1040
 Gln Leu Lys Leu Pro Ala Ala Met Leu Ala Ala Gln Ala Tyr Gly Arg
 1045 1050 1055
 Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly Pro Pro Gly Asp Pro
 1060 1065 1070
 Gly Pro Gln Gly Tyr Arg Gly Gln Lys Gly Glu Arg Gly Glu Pro Gly
 1075 1080 1085
 Ile Gly Leu Pro Gly Ser Pro Gly Leu Pro Gly Thr Ser Ala Leu Gly
 1090 1095 1100
 Leu Pro Gly Ser Pro Gly Ala Pro Gly Pro Gln Gly Pro Pro Gly Pro
 1105 1110 1115 1120
 Ser Gly Arg Cys Asn Pro Glu Asp Cys Leu Tyr Pro Val Ser His Ala
 1125 1130 1135
 His Gln Arg Thr Cys Gly Asn
 1140

<210> 96
 <211> 100
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic
 polypeptide

<400> 96
 Met Gly Met Met Cys Gly Ala Pro Ser Ala Thr Gln Pro Ala Thr Ala
 1 5 10 15
 Glu Thr Gln His Ile Ala Asp Gln Val Arg Ser Gln Leu Glu Glu Lys
 20 25 30
 Tyr Asn Lys Lys Phe Pro Val Phe Lys Ala Val Ser Phe Lys Ser Gln
 35 40 45
 Val Val Ala Gly Thr Asn Tyr Phe Ile Lys Val His Val Gly Asp Glu
 50 55 60
 Asp Phe Val His Leu Arg Val Phe Gln Ser Leu Pro His Glu Asn Lys
 65 70 75 80
 Pro Leu Thr Leu Ser Asn Tyr Gln Thr Asn Lys Ala Lys His Asp Glu
 85 90 95
 Leu Thr Tyr Phe
 100

<210> 97
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 97
 Met Met Cys Gly Ala Pro Ser Ala Thr Gln Pro Ala Thr Ala Glu Thr
 1 5 10 15
 Gln His Ile Ala Asp Gln Val Arg Ser Gln Leu Glu Glu Lys Glu Asn
 20 25 30
 Lys Lys Phe Pro Val Phe Lys Ala Val Ser Phe Lys Ser Gln Val Val
 35 40 45
 Ala Gly Thr Asn Tyr Phe Ile Lys Val His Val Gly Asp Glu Asp Phe
 50 55 60
 Val His Leu Arg Val Phe Gln Ser Leu Pro His Glu Asn Lys Pro Leu
 65 70 75 80
 Thr Leu Ser Asn Tyr Gln Thr Asn Lys Ala Lys His Asp Glu Leu Thr
 85 90 95
 Tyr Phe

<210> 98
 <211> 98
 <212> PRT
 <213> Oryctolagus cuniculus

<400> 98
 Met Met Cys Gly Ala Pro Ser Pro Ala Gln Ala Ala Thr Ala Glu Thr
 1 5 10 15
 Gln Asp Ile Ala Asp Gln Val Lys Ala Gln Leu Glu Glu Lys Glu Asn
 20 25 30
 Cys Lys Phe Asp Val Phe Lys Gly Met Ser Phe Lys Ser Gln Val Val
 35 40 45
 Ala Gly Thr Asn Tyr Phe Ile Lys Val His Val Gly Asp Asp Arg Phe
 50 55 60
 Ile His Leu Arg Val Phe Arg Ser Leu Pro His Glu Asn Lys Pro Leu
 65 70 75 80
 Ser Leu Ala Val Tyr Gln Ala Asn Lys Gly Glu His Asp Glu Leu Thr
 85 90 95
 Tyr Phe

<210> 99

<211> 98
 <212> PRT
 <213> Homo sapiens

<400> 99
 Met Met Cys Gly Ala Pro Ser Ala Thr Gln Pro Ala Thr Ala Glu Thr
 1 5 10 15
 Gln His Ile Ala Asp Gln Val Arg Ser Gln Leu Glu Glu Lys Tyr Asn
 20 25 30
 Lys Lys Phe Pro Val Phe Lys Ala Val Ser Phe Lys Ser Gln Val Val
 35 40 45
 Ala Gly Thr Asn Tyr Phe Ile Lys Val His Val Gly Asp Glu Asp Phe
 50 55 60
 Val His Leu Arg Val Phe Gln Ser Leu Pro His Glu Asn Lys Pro Leu
 65 70 75 80
 Thr Leu Ser Asn Tyr Gln Thr Asn Lys Ala Lys His Asp Glu Leu Thr
 85 90 95
 Tyr Phe

<210> 100
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 100
 Met Met Ser Gly Ala Pro Ser Ala Thr Gln Pro Ala Thr Ala Glu Thr
 1 5 10 15
 Gln His Ile Ala Asp Gln Val Arg Ser Gln Leu Glu Glu Lys Tyr Asn
 20 25 30
 Lys Lys Phe Pro Val Phe Lys Ala Val Ser Phe Lys Ser Gln Val Val
 35 40 45
 Ala Gly Thr Asn Tyr Phe Ile Lys Val His Val Gly Asp Glu Asp Phe
 50 55 60
 Val His Leu Arg Val Phe Gln Ser Leu Pro His Glu Asn Lys Pro Leu
 65 70 75 80
 Thr Leu Ser Asn Tyr Gln Thr Asn Lys Ala Lys His Asp Glu Leu Thr
 85 90 95
 Tyr Phe

<210> 101
 <211> 370

<212> PRT

<213> Rattus norvegicus

<400> 101

Met Glu Val Ser Asn Leu Ser Gly Ala Thr Pro Gly Ile Ala Phe Pro
1 5 10 15

Pro Gly Pro Glu Ser Cys Ser Asp Ser Pro Ser Ser Gly Arg Ser Met
20 25 30

Gly Ser Thr Pro Gly Gly Leu Ile Leu Ser Gly Arg Glu Pro Pro Phe
35 40 45

Ser Ala Phe Thr Val Leu Val Val Thr Leu Leu Val Leu Leu Ile Ala
50 55 60

Ala Thr Phe Leu Trp Asn Leu Leu Val Leu Val Thr Ile Leu Arg Val
65 70 75 80

Arg Ala Phe His Arg Val Pro His Asn Leu Val Ala Ser Thr Ala Val
85 90 95

Ser Asp Val Leu Val Ala Ala Leu Val Met Pro Leu Ser Leu Val Ser
100 105 110

Glu Leu Ser Ala Gly Arg Arg Trp Gln Leu Gly Arg Ser Leu Cys His
115 120 125

Val Trp Ile Ser Phe Asp Val Leu Cys Cys Thr Ala Ser Ile Trp Asn
130 135 140

Val Ala Ala Ile Ala Leu Asp Arg Tyr Trp Thr Ile Thr Arg His Leu
145 150 155 160

Gln Tyr Thr Leu Arg Thr Arg Arg Arg Ala Ser Ala Leu Met Ile Ala
165 170 175

Ile Thr Trp Ala Leu Ser Ala Leu Ile Ala Leu Ala Pro Leu Leu Phe
180 185 190

Gly Trp Gly Glu Ala Tyr Asp Ala Arg Leu Gln Arg Cys Gln Val Ser
195 200 205

Gln Glu Pro Ser Tyr Ala Val Phe Ser Thr Cys Gly Ala Phe Tyr Val
210 215 220

Pro Leu Ala Val Val Leu Phe Val Tyr Trp Lys Ile Tyr Lys Ala Ala
225 230 235 240

Lys Phe Arg Phe Gly Arg Arg Arg Arg Ala Val Val Pro Leu Pro Ala
245 250 255

Thr Thr Gln Ala Lys Glu Ala Pro Gln Glu Ser Glu Thr Val Phe Thr
260 265 270

Ala Arg Cys Arg Ala Thr Val Ala Phe Gln Thr Ser Gly Asp Ser Trp
275 280 285

Arg Glu Gln Lys Glu Lys Arg Ala Ala Met Met Val Gly Ile Leu Ile
 290 295 300

Gly Val Phe Val Leu Cys Trp Ile Pro Phe Phe Leu Thr Glu Leu Val
 305 310 315 320

Ser Pro Leu Cys Ala Cys Ser Leu Pro Pro Ile Trp Lys Ser Ile Phe
 325 330 335

Leu Trp Leu Gly Tyr Ser Asn Ser Phe Phe Asn Pro Leu Ile Tyr Thr
 340 345 350

Ala Phe Asn Lys Asn Tyr Asn Asn Ala Phe Lys Ser Leu Phe Thr Lys
 355 360 365

Gln Arg
 370

<210> 102

<211> 370

<212> PRT

<213> Mus musculus

<400> 102

Met Glu Val Ser Asn Leu Ser Gly Ala Thr Pro Gly Leu Ala Phe Pro
 1 5 10 15

Pro Gly Pro Glu Ser Cys Ser Asp Ser Pro Ser Ser Gly Arg Ser Met
 20 25 30

Gly Ser Thr Pro Gly Gly Leu Ile Leu Pro Gly Arg Glu Pro Pro Phe
 35 40 45

Ser Ala Phe Thr Val Leu Val Val Thr Leu Leu Val Leu Leu Ile Ala
 50 55 60

Ala Thr Phe Leu Trp Asn Leu Leu Val Leu Val Thr Ile Leu Arg Val
 65 70 75 80

Arg Ala Phe His Arg Val Pro His Asn Leu Val Ala Ser Thr Ala Val
 85 90 95

Ser Asp Val Leu Val Ala Val Leu Val Met Pro Leu Ser Leu Val Ser
 100 105 110

Glu Leu Ser Ala Gly Arg Arg Trp Gln Leu Gly Arg Ser Leu Cys His
 115 120 125

Val Trp Ile Ser Phe Asp Val Leu Cys Cys Thr Ala Ser Ile Trp Asn
 130 135 140

Val Ala Ala Ile Ala Leu Asp Arg Tyr Trp Thr Ile Thr Arg His Leu
 145 150 155 160

Gln Tyr Thr Leu Arg Thr Arg Ser Arg Ala Ser Ala Leu Met Ile Ala

165										170					175							
Ile	Thr	Trp	Ala	Leu	Ser	Ala	Leu	Ile	Ala	Leu	Ala	Pro	Leu	Leu	Phe							
			180					185					190									
Gly	Trp	Gly	Glu	Ala	Tyr	Asp	Ala	Arg	Leu	Gln	Arg	Cys	Gln	Val	Ser							
		195					200					205										
Gln	Glu	Pro	Ser	Tyr	Ala	Val	Phe	Ser	Thr	Cys	Gly	Ala	Phe	Tyr	Leu							
		210				215					220											
Pro	Leu	Ala	Val	Val	Leu	Phe	Val	Tyr	Trp	Lys	Ile	Tyr	Lys	Ala	Ala							
		225			230					235					240							
Lys	Phe	Arg	Phe	Gly	Arg	Arg	Arg	Arg	Ala	Val	Val	Pro	Leu	Pro	Ala							
				245					250					255								
Thr	Thr	Gln	Ala	Lys	Glu	Ala	Pro	Pro	Glu	Ser	Glu	Met	Val	Phe	Thr							
			260					265					270									
Ala	Arg	Arg	Arg	Ala	Thr	Val	Thr	Phe	Gln	Thr	Ser	Gly	Asp	Ser	Trp							
			275				280					285										
Arg	Glu	Gln	Lys	Glu	Lys	Arg	Ala	Ala	Met	Met	Val	Gly	Ile	Leu	Ile							
		290				295					300											
Gly	Val	Phe	Val	Leu	Cys	Trp	Ile	Pro	Phe	Phe	Leu	Thr	Glu	Leu	Ile							
					310					315					320							
Ser	Pro	Leu	Cys	Ala	Cys	Ser	Leu	Pro	Pro	Ile	Trp	Lys	Ser	Ile	Phe							
				325					330					335								
Leu	Trp	Leu	Gly	Tyr	Ser	Asn	Ser	Phe	Phe	Asn	Pro	Leu	Ile	Tyr	Thr							
			340					345					350									
Ala	Phe	Asn	Lys	Asn	Tyr	Asn	Asn	Ala	Phe	Lys	Ser	Leu	Phe	Thr	Lys							
			355				360					365										
Gln	Arg																					
			370																			

<210> 103
 <211> 369
 <212> PRT
 <213> Rattus norvegicus

<400> 103
 Met Glu Val Ser Asn Leu Ser Gly Ala Thr Pro Gly Ile Ala Phe Pro
 1 5 10 15
 Pro Gly Pro Glu Ser Cys Ser Asp Ser Pro Ser Ser Gly Arg Ser Met
 20 25 30
 Gly Ser Thr Pro Gly Gly Leu Ile Leu Ser Gly Arg Glu Pro Pro Phe
 35 40 45

Ser Ala Phe Thr Val Leu Val Val Thr Leu Leu Val Leu Leu Ile Ala
 50 55 60
 Ala Thr Phe Leu Trp Asn Leu Leu Val Leu Val Thr Ile Leu Arg Val
 65 70 75 80
 Arg Ala Phe His Arg Val Pro His Asn Leu Val Ala Ser Thr Ala Val
 85 90 95
 Ser Asp Val Leu Val Ala Ala Leu Val Met Pro Leu Ser Leu Val Ser
 100 105 110
 Glu Leu Ser Ala Gly Arg Arg Trp Gln Leu Gly Arg Ser Leu Cys His
 115 120 125
 Val Trp Ile Ser Phe Asp Val Leu Cys Cys Thr Ala Ser Ile Trp Asn
 130 135 140
 Val Ala Ala Ile Ala Leu Asp Arg Tyr Trp Thr Ile Thr Arg His Leu
 145 150 155 160
 Gln Tyr Thr Leu Arg Thr Arg Arg Arg Ala Ser Ala Leu Met Ile Ala
 165 170 175
 Thr Trp Ala Leu Ser Ala Leu Ile Ala Leu Ala Pro Leu Leu Phe Gly
 180 185 190
 Trp Gly Glu Ala Tyr Asp Ala Arg Leu Gln Arg Cys Gln Val Ser Gln
 195 200 205
 Glu Pro Ser Tyr Ala Val Phe Ser Thr Cys Gly Ala Phe Tyr Val Pro
 210 215 220
 Leu Ala Val Val Leu Phe Val Tyr Trp Lys Ile Tyr Lys Ala Ala Lys
 225 230 235 240
 Phe Arg Phe Gly Arg Arg Arg Arg Ala Val Val Pro Leu Pro Ala Thr
 245 250 255
 Thr Gln Ala Lys Glu Ala Pro Gln Glu Ser Glu Thr Val Phe Thr Ala
 260 265 270
 Arg Cys Arg Ala Thr Val Ala Phe Gln Thr Ser Gly Asp Ser Trp Arg
 275 280 285
 Glu Gln Lys Glu Lys Arg Ala Ala Met Met Val Gly Ile Leu Ile Gly
 290 295 300
 Val Phe Val Leu Cys Trp Ile Pro Phe Phe Leu Thr Glu Leu Val Ser
 305 310 315 320
 Pro Leu Cys Ala Cys Ser Leu Pro Pro Ile Trp Lys Ser Ile Phe Leu
 325 330 335
 Trp Leu Gly Tyr Ser Asn Ser Phe Phe Asn Pro Leu Ile Tyr Thr Ala
 340 345 350

Phe Asn Lys Asn Tyr Asn Asn Ala Phe Lys Ser Leu Phe Thr Lys Gln
 355 360 365

Arg

<210> 104
 <211> 357
 <212> PRT
 <213> Homo sapiens

<400> 104
 Met Asp Leu Pro Val Asn Leu Thr Ser Phe Ser Leu Ser Thr Pro Ser
 1 5 10 15
 Pro Leu Glu Thr Asn His Ser Leu Gly Lys Asp Asp Leu Arg Pro Ser
 20 25 30
 Ser Pro Leu Leu Ser Val Phe Gly Val Leu Ile Leu Thr Leu Leu Gly
 35 40 45
 Phe Leu Val Ala Ala Thr Phe Ala Trp Asn Leu Leu Val Leu Ala Thr
 50 55 60
 Ile Leu Arg Val Arg Thr Phe His Arg Val Pro His Asn Leu Val Ala
 65 70 75 80
 Ser Met Ala Val Ser Asp Val Leu Val Ala Ala Leu Val Met Pro Leu
 85 90 95
 Ser Leu Val His Glu Leu Ser Gly Arg Arg Trp Gln Leu Gly Arg Arg
 100 105 110
 Leu Cys Gln Leu Trp Ile Ala Cys Asp Val Leu Cys Cys Thr Ala Ser
 115 120 125
 Ile Trp Asn Val Thr Ala Ile Ala Leu Asp Arg Tyr Trp Ser Ile Thr
 130 135 140
 Arg His Met Glu Tyr Thr Leu Arg Thr Arg Lys Cys Val Ser Asn Val
 145 150 155 160
 Met Ile Ala Leu Thr Trp Ala Leu Ser Ala Val Ile Ser Leu Ala Pro
 165 170 175
 Leu Leu Phe Gly Trp Gly Glu Thr Tyr Ser Glu Gly Ser Glu Glu Cys
 180 185 190
 Gln Val Ser Arg Glu Pro Ser Tyr Ala Val Phe Ser Thr Val Gly Ala
 195 200 205
 Phe Tyr Leu Pro Leu Cys Val Val Leu Phe Val Tyr Trp Lys Ile Tyr
 210 215 220
 Lys Ala Ala Lys Phe Arg Val Gly Ser Arg Lys Thr Asn Ser Val Ser
 225 230 235 240

Pro Ile Ser Glu Ala Val Glu Val Lys Asp Ser Ala Lys Gln Pro Gln
 245 250 255
 Met Val Phe Thr Val Arg His Ala Thr Val Thr Phe Gln Pro Glu Gly
 260 265 270
 Asp Thr Trp Arg Glu Gln Lys Glu Gln Arg Ala Ala Leu Met Val Gly
 275 280 285
 Ile Leu Ile Gly Val Phe Val Leu Cys Trp Ile Pro Phe Phe Leu Thr
 290 295 300
 Glu Leu Ile Ser Pro Leu Cys Ser Cys Asp Ile Pro Ala Ile Trp Lys
 305 310 315 320
 Ser Ile Phe Leu Trp Leu Gly Tyr Ser Asn Ser Phe Phe Asn Pro Leu
 325 330 335
 Ile Tyr Thr Ala Phe Asn Lys Asn Tyr Asn Ser Ala Phe Lys Asn Phe
 340 345 350
 Phe Ser Arg Gln His
 355

<210> 105
 <211> 357
 <212> PRT
 <213> Rattus norvegicus

<400> 105
 Met Asp Leu Pro Ile Asn Leu Thr Ser Phe Ser Leu Ser Thr Pro Ser
 1 5 10 15
 Thr Leu Glu Pro Asn Arg Ser Leu Asp Thr Glu Ala Leu Arg Thr Ser
 20 25 30
 Gln Ser Phe Leu Ser Ala Phe Arg Val Leu Val Leu Thr Leu Leu Gly
 35 40 45
 Phe Leu Ala Ala Ala Thr Phe Thr Trp Asn Leu Leu Val Leu Ala Thr
 50 55 60
 Ile Leu Arg Val Arg Thr Phe His Arg Val Pro His Asn Leu Val Ala
 65 70 75 80
 Ser Met Ala Ile Ser Asp Val Leu Val Ala Val Leu Val Met Pro Leu
 85 90 95
 Ser Leu Val His Glu Leu Ser Gly Arg Arg Trp Gln Leu Gly Arg Arg
 100 105 110
 Leu Cys Gln Leu Trp Ile Ala Cys Asp Val Leu Cys Cys Thr Ala Ser
 115 120 125
 Ile Trp Asn Val Thr Ala Ile Ala Leu Asp Arg Tyr Trp Ser Ile Thr

130	135	140
Arg His Leu Glu Tyr Thr	Leu Arg Ala Arg Lys Arg Val Ser Asn Val	
145	150	155 160
Met Ile Leu Leu Thr Trp	Ala Leu Ser Ala Val Ile Ser Leu Ala Pro	
	165	170 175
Leu Leu Phe Gly Trp Gly	Glu Thr Tyr Ser Glu Leu Ser Glu Glu Cys	
	180	185 190
Gln Val Ser Arg Glu Pro	Ser Tyr Thr Val Phe Ser Thr Val Gly Ala	
	195	200 205
Phe Tyr Leu Pro Leu Cys	Val Val Leu Phe Val Tyr Trp Lys Ile Tyr	
	210	215 220
Lys Ala Ala Lys Phe Arg	Met Gly Ser Arg Lys Thr Asn Ser Val Ser	
	225	230 235 240
Pro Ile Pro Glu Ala Val	Glu Val Lys Asp Ala Ser Gln His Pro Gln	
	245	250 255
Met Val Phe Thr Val Arg	His Ala Thr Val Thr Phe Gln Thr Glu Gly	
	260	265 270
Asp Thr Trp Arg Glu Gln	Lys Glu Gln Arg Ala Ala Leu Met Val Gly	
	275	280 285
Ile Leu Ile Gly Val Phe	Val Leu Cys Trp Phe Pro Phe Phe Val Thr	
	290	295 300
Glu Leu Ile Ser Pro Leu	Cys Ser Trp Asp Ile Pro Ala Leu Trp Lys	
	305	310 315 320
Ser Ile Phe Leu Trp Leu	Gly Tyr Ser Asn Ser Phe Phe Asn Pro Leu	
	325	330 335
Ile Tyr Thr Ala Phe Asn	Arg Ser Tyr Ser Ser Ala Phe Lys Val Phe	
	340	345 350
Phe Ser Lys Gln Gln		
	355	

<210> 106
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 106
 Ala Thr Ser Phe Pro Ile Ala Leu Ile Tyr Leu Val Leu Ile Ala Val
 1 5 10 15
 Gly Gln Asn Tyr Met Lys Glu Arg Lys Gly Phe Asn Leu Gln Gly Pro
 20 25 30

Leu Ile Leu Trp Ser Phe Cys Leu Ala Ile Phe Ser Ile Leu Gly Ala
 35 40 45
 Val Arg Met Trp Gly Ile Met Gly Thr Val Leu Leu Thr Gly Gly Leu
 50 55 60
 Lys Gln Thr Val Cys Phe Ile Asn Phe Ile Asp Asn Ser Thr Val Lys
 65 70 75 80
 Phe Trp Ser Trp Val Phe Leu Leu Ser Lys Val Ile Glu Leu Gly Asp
 85 90 95
 Thr Ala Phe Ile Ile Leu Arg Lys Arg Pro Leu Ile Phe Ile His Trp
 100 105 110
 Tyr His His Ser Thr Val Leu Val Tyr Thr Ser Phe Gly Tyr Lys Asn
 115 120 125
 Lys Val Pro Ala Gly Gly Trp Phe Val Thr Met Asn Phe Gly Val His
 130 135 140
 Ala Ile Met Tyr Thr Tyr Tyr Thr Leu Lys Ala Ala Asn Val Lys Pro
 145 150 155 160
 Pro Lys Met Leu Pro Met Leu Ile Thr Ser Leu Gln Ile Leu Gln Met
 165 170 175
 Phe Val Gly Ala Ile Val Ser Ile Leu Thr Tyr Ile Trp Arg Gln Asp
 180 185 190
 Gln Gly Cys His Thr Thr Met Glu His Leu Phe Trp Ser Phe Ile Leu
 195 200 205
 Tyr Met Thr Tyr Phe Ile Leu Phe Ala His Phe Phe Cys Gln Thr Tyr
 210 215 220
 Ile Arg Pro Lys Val Lys Ala Lys Thr Lys Ser Gln
 225 230 235

<210> 107
 <211> 271
 <212> PRT
 <213> Mus musculus

<400> 107
 Met Asp Thr Ser Met Asn Phe Ser Arg Gly Leu Lys Met Asp Leu Met
 1 5 10 15
 Gln Pro Tyr Asp Phe Glu Thr Phe Gln Asp Leu Arg Pro Phe Leu Glu
 20 25 30
 Glu Tyr Trp Val Ser Ser Phe Leu Ile Val Val Val Tyr Leu Leu Leu
 35 40 45
 Ile Val Val Gly Gln Thr Tyr Met Arg Thr Arg Lys Ser Phe Ser Leu
 50 55 60

Gln	Arg	Pro	Leu	Ile	Leu	Trp	Ser	Phe	Phe	Leu	Ala	Ile	Phe	Ser	Ile	65	70	75	80
Leu	Gly	Thr	Leu	Arg	Met	Trp	Lys	Phe	Met	Ala	Thr	Val	Met	Phe	Thr	85	90	95	
Val	Gly	Leu	Lys	Gln	Thr	Val	Cys	Phe	Ala	Ile	Tyr	Thr	Asp	Asp	Ala	100	105	110	
Val	Val	Arg	Phe	Trp	Ser	Phe	Leu	Phe	Leu	Leu	Ser	Lys	Val	Val	Glu	115	120	125	
Leu	Gly	Asp	Thr	Ala	Phe	Ile	Ile	Leu	Arg	Lys	Arg	Pro	Leu	Ile	Phe	130	135	140	
Val	His	Trp	Tyr	His	His	Ser	Thr	Val	Leu	Leu	Phe	Thr	Ser	Phe	Gly	145	150	155	160
Tyr	Lys	Asn	Lys	Val	Pro	Ser	Gly	Gly	Trp	Phe	Met	Thr	Met	Asn	Phe	165	170	175	
Gly	Val	His	Ser	Val	Met	Tyr	Thr	Tyr	Tyr	Thr	Met	Lys	Ala	Ala	Lys	180	185	190	
Leu	Lys	His	Pro	Asn	Leu	Leu	Pro	Met	Val	Ile	Thr	Ser	Leu	Gln	Ile	195	200	205	
Leu	Gln	Met	Val	Leu	Gly	Thr	Ile	Phe	Gly	Ile	Leu	Asn	Tyr	Ile	Trp	210	215	220	
Arg	Gln	Glu	Lys	Gly	Cys	His	Thr	Thr	Thr	Glu	His	Phe	Phe	Trp	Ser	225	230	235	240
Phe	Met	Leu	Tyr	Gly	Thr	Tyr	Phe	Ile	Leu	Phe	Ala	His	Phe	Phe	His	245	250	255	
Arg	Ala	Tyr	Leu	Arg	Pro	Lys	Gly	Lys	Val	Ala	Ser	Lys	Ser	Gln		260	265	270	

<210> 108

<211> 360

<212> PRT

<213> Mus musculus

<220>

<221> VARIANT

<222> (19)

<223> Wherein Xaa is any amino acid as defined in the specification

<220>

<221> VARIANT

<222> (41)

<223> Wherein Xaa is any amino acid as defined in the specification

<220>

<221> VARIANT

<222> (166)

<223> Wherein Xaa is any amino acid as defined in the
specification

<400> 108

Pro Cys Cys Val Phe Pro Leu Phe Trp Val Phe Ala Gly Ala Trp Pro
1 5 10 15
Phe Cys Xaa Leu Leu Phe Phe Phe Phe Pro Asn His Gly Ala Gly Pro
20 25 30
Ala Arg Gly Gly Leu Val Cys Ser Xaa Val Pro Gly Ser Gly Ala Leu
35 40 45
Leu Leu Ile Leu His Phe Phe Leu Ser Trp Val Ser Ser Ser Leu Gly
50 55 60
Pro Pro Pro Ser Ser Ser Ser Leu Ala Leu Ala Pro Leu Pro Ser Pro
65 70 75 80
Ser Ser Val Pro Arg Arg Leu Arg Gly Arg Gly Gly His Leu Pro Gly
85 90 95
Phe Leu Pro Arg Val Trp Leu Gly Leu Cys Pro Leu Trp Leu Arg Asp
100 105 110
Val Ser Gly Leu Trp Ala Leu Phe Gly Gly Val Leu Gly Ala Leu Leu
115 120 125
Ser Pro Cys Gly Arg Leu Ser Val Ala Pro Arg Cys Trp Pro Gly Leu
130 135 140
Pro Gly Gly Ala Gly Ala Leu Pro Leu Ala Glu Pro Leu Ile Leu Trp
145 150 155 160
Ser Phe Phe Leu Ala Xaa Phe Arg Phe Leu Gly Ala Leu Gly Val Trp
165 170 175
Lys Phe Met Ala Thr Val Met Phe Thr Val Gly Leu Lys Gln Thr Val
180 185 190
Cys Phe Ala Leu Tyr Thr Asp Asp Ala Val Val Arg Phe Trp Ser Phe
195 200 205
Leu Phe Leu Leu Ser Lys Val Val Glu Leu Gly Asp Thr Ala Phe Ile
210 215 220
Ile Leu Arg Lys Arg Pro Leu Ile Phe Val His Trp Tyr His His Ser
225 230 235 240
Thr Val Leu Leu Phe Thr Ser Phe Gly Tyr Lys Asn Lys Val Pro Ser
245 250 255
Gly Gly Trp Phe Met Thr Met Asn Phe Gly Val His Ser Val Met Tyr

260					265					270					
Thr	Tyr	Tyr	Thr	Met	Lys	Ala	Ala	Lys	Leu	Lys	His	Pro	Asn	Leu	Leu
		275					280					285			
Pro	Met	Val	Ile	Thr	Ser	Leu	Gln	Ile	Leu	Gln	Met	Val	Leu	Gly	Thr
		290					295					300			
Ile	Phe	Gly	Ile	Leu	Asn	Tyr	Ile	Trp	Arg	Gln	Glu	Lys	Gly	Cys	His
305							310					315			320
Thr	Thr	Thr	Glu	His	Phe	Phe	Trp	Ser	Phe	Met	Leu	Tyr	Gly	Thr	Tyr
				325					330					335	
Phe	Ile	Leu	Phe	Ala	His	Phe	Phe	His	Arg	Ala	Tyr	Leu	Arg	Pro	Lys
				340					345					350	
Gly	Lys	Val	Ala	Ser	Lys	Ser	Gln								
		355					360								

<210> 109
 <211> 265
 <212> PRT
 <213> Homo sapiens

<400> 109															
Met	Asn	Met	Ser	Val	Leu	Thr	Leu	Gln	Glu	Tyr	Glu	Phe	Glu	Lys	Gln
1				5					10					15	
Phe	Asn	Glu	Asn	Glu	Ala	Ile	Gln	Trp	Met	Gln	Glu	Asn	Trp	Lys	Lys
			20					25					30		
Ser	Phe	Leu	Phe	Ser	Ala	Leu	Tyr	Ala	Ala	Phe	Ile	Phe	Gly	Gly	Arg
		35					40					45			
His	Leu	Met	Asn	Lys	Arg	Ala	Lys	Phe	Glu	Leu	Arg	Lys	Pro	Leu	Val
	50					55					60				
Leu	Trp	Ser	Leu	Thr	Leu	Ala	Val	Phe	Ser	Ile	Phe	Gly	Ala	Leu	Arg
65					70					75				80	
Thr	Gly	Ala	Tyr	Met	Val	Tyr	Ile	Leu	Met	Thr	Lys	Gly	Leu	Lys	Gln
				85					90					95	
Ser	Val	Cys	Asp	Gln	Gly	Phe	Tyr	Asn	Gly	Pro	Val	Ser	Lys	Phe	Trp
			100					105					110		
Ala	Tyr	Ala	Phe	Val	Leu	Ser	Lys	Ala	Pro	Glu	Leu	Gly	Asp	Thr	Ile
		115					120					125			
Phe	Ile	Ile	Leu	Arg	Lys	Gln	Lys	Leu	Ile	Phe	Leu	His	Trp	Tyr	His
	130					135					140				
His	Ile	Thr	Val	Leu	Leu	Tyr	Ser	Trp	Tyr	Ser	Tyr	Lys	Asp	Met	Val
145					150					155					160

Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val
165 170 175

Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg Val Ser Arg
180 185 190

Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met
195 200 205

Gly Cys Val Val Asn Tyr Leu Val Phe Cys Trp Met Gln His Asp Gln
210 215 220

Cys His Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met Tyr Leu
225 230 235 240

Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe Glu Ala Tyr Ile Gly
245 250 255

Lys Met Arg Lys Thr Thr Lys Ala Glu
260 265

<210> 110
<211> 267
<212> PRT
<213> Mus musculus

<400> 110
Met Asn Met Ser Val Leu Thr Leu Gln Glu Tyr Glu Phe Glu Lys Gln
1 5 10 15

Phe Asn Glu Asn Glu Ala Ile Gln Trp Met Gln Glu Asn Trp Lys Lys
20 25 30

Ser Phe Leu Phe Ser Ala Leu Tyr Ala Ala Phe Ile Phe Gly Gly Arg
35 40 45

His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro Leu Val
50 55 60

Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala Leu Arg
65 70 75 80

Thr Gly Ala Tyr Met Leu Tyr Ile Leu Met Thr Lys Gly Leu Lys Gln
85 90 95

Ser Val Cys Asp Gln Ser Phe Tyr Asn Gly Pro Val Ser Lys Phe Trp
100 105 110

Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp Thr Ile
115 120 125

Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His Trp Tyr His
130 135 140

His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp Met Val
145 150 155 160

Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val
 165 170 175
 Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg Val Ser Arg
 180 185 190
 Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met
 195 200 205
 Gly Cys Val Ile Asn Tyr Leu Val Phe Asn Trp Met Gln His Asp Asn
 210 215 220
 Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met
 225 230 235 240
 Tyr Leu Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe Glu Ala Tyr
 245 250 255
 Ile Gly Lys Val Lys Lys Ala Thr Lys Ala Glu
 260 265

<210> 111
 <211> 526
 <212> PRT
 <213> Homo sapiens

<400> 111
 Met Ala His Tyr Ile Thr Phe Leu Cys Met Val Leu Val Leu Leu Leu
 1 5 10 15
 Gln Asn Ser Val Leu Ala Glu Asp Gly Glu Val Arg Ser Ser Cys Arg
 20 25 30
 Thr Ala Pro Thr Asp Leu Val Phe Ile Leu Asp Gly Ser Tyr Ser Val
 35 40 45
 Gly Pro Glu Asn Phe Glu Ile Val Lys Lys Trp Leu Val Asn Ile Thr
 50 55 60
 Lys Asn Phe Asp Ile Gly Pro Lys Phe Ile Gln Val Gly Val Val Gln
 65 70 75 80
 Tyr Ser Asp Tyr Pro Val Leu Glu Ile Pro Leu Gly Ser Tyr Asp Ser
 85 90 95
 Gly Glu His Leu Thr Ala Ala Val Glu Ser Ile Leu Tyr Leu Gly Gly
 100 105 110
 Asn Thr Lys Thr Gly Lys Ala Ile Gln Phe Ala Leu Asp Tyr Leu Phe
 115 120 125
 Ala Lys Ser Ser Arg Phe Leu Thr Lys Ile Ala Val Val Leu Thr Asp
 130 135 140
 Gly Lys Ser Gln Asp Asp Val Lys Asp Ala Ala Gln Ala Ala Arg Asp

145		150		155		160
Ser Lys Ile Thr	Leu Phe Ala Ile Gly Val Gly Ser Glu Thr Glu Asp					
	165			170		175
Ala Glu Leu Arg	Ala Ile Ala Asn Lys Pro Ser Ser Thr Tyr Val Phe					
	180		185			190
Tyr Val Glu Asp Tyr	Ile Ala Ile Ser Lys Ile Arg Glu Val Met Lys					
	195		200		205	
Gln Lys Leu Cys Glu Glu	Ser Val Cys Pro Thr Arg Ile Pro Val Ala					
	210		215		220	
Ala Arg Asp Glu Arg Gly Phe Asp Ile Leu Leu Gly Leu Asp Val Asn						
225		230		235		240
Lys Lys Val Lys Lys Arg Ile Gln Leu Ser Pro Lys Lys Ile Lys Gly						
	245		250			255
Tyr Glu Val Thr Ser Lys Val Asp Leu Ser Glu Leu Thr Ser Asn Val						
	260		265			270
Phe Pro Glu Gly Leu Pro Pro Ser Tyr Val Phe Val Ser Thr Gln Arg						
	275		280			285
Phe Lys Val Lys Lys Ile Trp Asp Leu Trp Arg Ile Leu Thr Ile Asp						
	290		295		300	
Gly Arg Pro Gln Ile Ala Val Thr Leu Asn Gly Val Asp Lys Ile Leu						
305		310		315		320
Leu Phe Thr Thr Thr Ser Val Ile Asn Gly Ser Gln Val Val Thr Phe						
	325		330			335
Ala Asn Pro Gln Val Lys Thr Leu Phe Asp Glu Gly Trp His Gln Ile						
	340		345			350
Arg Leu Leu Val Thr Glu Gln Asp Val Thr Leu Tyr Ile Asp Asp Gln						
	355		360			365
Gln Ile Glu Asn Lys Pro Leu His Pro Val Leu Gly Ile Leu Ile Asn						
	370		375		380	
Gly Gln Thr Gln Ile Gly Lys Tyr Ser Gly Lys Glu Glu Thr Val Gln						
385		390		395		400
Phe Asp Val Gln Lys Leu Arg Ile Tyr Cys Asp Pro Glu Gln Asn Asn						
	405		410			415
Arg Glu Thr Ala Cys Glu Ile Pro Gly Phe Cys Leu Asn Gly Pro Ser						
	420		425			430
Asp Val Gly Ser Thr Pro Ala Pro Cys Ile Cys Pro Pro Gly Lys Pro						
	435		440			445
Gly Leu Gln Gly Pro Lys Gly Asp Pro Gly Leu Pro Gly Asn Pro Gly						

450		455		460											
Tyr	Pro	Gly	Gln	Pro	Gly	Gln	Asp	Gly	Lys	Pro	Val	Ser	Thr	Glu	Ser
465					470					475					480
Leu	Val	Ile	Ser	Gly	Ile	Ser	Gly	Ile	Thr	Gly	Tyr	Gln	Gly	Ile	Ala
				485					490					495	
Gly	Thr	Pro	Gly	Val	Pro	Gly	Ser	Pro	Gly	Ile	Gln	Gly	Ala	Arg	Gly
			500					505					510		
Leu	Pro	Gly	Tyr	Lys	Gly	Glu	Pro	Gly	Arg	Asp	Gly	Asp	Lys		
		515					520					525			

<210> 112
 <211> 496
 <212> PRT
 <213> Homo sapiens

<400> 112

Met	Arg	Val	Leu	Ser	Gly	Thr	Ser	Leu	Met	Leu	Cys	Ser	Leu	Leu	Leu
1				5					10					15	
Leu	Leu	Gln	Ala	Leu	Cys	Ser	Pro	Gly	Leu	Ala	Pro	Gln	Ser	Arg	Gly
		20						25					30		
His	Leu	Cys	Arg	Thr	Arg	Pro	Thr	Asp	Leu	Val	Phe	Val	Val	Asp	Ser
		35					40					45			
Ser	Arg	Ser	Val	Arg	Pro	Val	Glu	Phe	Glu	Lys	Val	Lys	Val	Phe	Leu
	50					55					60				
Ser	Gln	Val	Ile	Glu	Ser	Leu	Asp	Val	Gly	Pro	Asn	Ala	Thr	Arg	Val
65					70				75					80	
Gly	Met	Val	Asn	Tyr	Ala	Ser	Thr	Val	Lys	Gln	Glu	Phe	Ser	Leu	Arg
			85						90					95	
Ala	His	Val	Ser	Lys	Ala	Ala	Leu	Leu	Gln	Ala	Val	Arg	Arg	Ile	Gln
		100					105						110		
Pro	Leu	Ser	Thr	Gly	Thr	Met	Thr	Gly	Leu	Ala	Ile	Gln	Phe	Ala	Ile
	115					120						125			
Thr	Lys	Ala	Phe	Gly	Asp	Ala	Glu	Gly	Gly	Arg	Ser	Arg	Ser	Pro	Asp
	130					135					140				
Ile	Ser	Lys	Val	Val	Ile	Val	Val	Thr	Asp	Gly	Arg	Pro	Gln	Asp	Ser
145					150					155				160	
Val	Gln	Asp	Val	Ser	Ala	Arg	Ala	Arg	Ala	Ser	Gly	Val	Glu	Leu	Phe
			165					170					175		
Ala	Ile	Gly	Val	Gly	Ser	Val	Asp	Lys	Ala	Thr	Leu	Arg	Gln	Ile	Ala
			180					185					190		

Ser Glu Pro Gln Asp Glu His Val Asp Tyr Val Glu Ser Tyr Ser Val
 195 200 205
 Ile Glu Lys Leu Ser Arg Lys Phe Gln Glu Ala Phe Cys Val Val Ser
 210 215 220
 Asp Leu Cys Ala Thr Gly Asp His Asp Cys Glu Gln Val Cys Ile Ser
 225 230 235 240
 Ser Pro Gly Ser Tyr Thr Cys Ala Cys His Glu Gly Phe Thr Leu Asn
 245 250 255
 Ser Asp Gly Lys Thr Cys Asn Val Cys Ser Gly Gly Gly Gly Ser Ser
 260 265 270
 Ala Thr Asp Leu Val Phe Leu Ile Asp Gly Ser Lys Ser Val Arg Pro
 275 280 285
 Glu Asn Phe Glu Leu Val Lys Lys Phe Ile Ser Gln Ile Val Asp Thr
 290 295 300
 Leu Asp Val Ser Asp Lys Leu Ala Gln Val Gly Leu Val Gln Tyr Ser
 305 310 315 320
 Ser Ser Val Arg Gln Glu Phe Pro Leu Gly Arg Phe His Thr Lys Lys
 325 330 335
 Asp Ile Lys Ala Ala Val Arg Asn Met Ser Tyr Met Glu Lys Gly Thr
 340 345 350
 Met Thr Gly Ala Ala Leu Lys Tyr Leu Ile Asp Asn Ser Phe Thr Val
 355 360 365
 Ser Ser Gly Ala Arg Pro Gly Ala Gln Lys Val Gly Ile Val Phe Thr
 370 375 380
 Asp Gly Arg Ser Gln Asp Tyr Ile Asn Asp Ala Ala Lys Lys Ala Lys
 385 390 395 400
 Asp Leu Gly Phe Lys Met Phe Ala Val Gly Val Gly Asn Ala Val Glu
 405 410 415
 Asp Glu Leu Arg Glu Ile Ala Ser Glu Pro Val Ala Glu His Tyr Phe
 420 425 430
 Tyr Thr Ala Asp Phe Lys Thr Ile Asn Gln Ile Gly Lys Lys Leu Gln
 435 440 445
 Lys Lys Ile Cys Val Glu Glu Asp Pro Cys Ala Cys Glu Ser Leu Val
 450 455 460
 Lys Phe Gln Ala Lys Val Glu Gly Leu Leu Gln Ala Leu Thr Arg Lys
 465 470 475 480
 Leu Glu Ala Val Ser Lys Arg Leu Ala Ile Leu Glu Asn Thr Val Val
 485 490 495

<210> 113
 <211> 500
 <212> PRT
 <213> Mus musculus

<400> 113
 Met Lys Val Thr Ser Gly Pro Ala Ser Ala Leu Cys Ser Leu Leu Leu
 1 5 10 15
 Leu Leu Leu Leu Leu Leu Gln Val Pro Asp Ser Leu Ser Leu Val Pro
 20 25 30
 Gln Pro Arg Gly His Leu Cys Arg Thr Arg Pro Thr Asp Leu Val Phe
 35 40 45
 Val Val Asp Ser Ser Arg Ser Val Arg Pro Val Glu Phe Glu Lys Val
 50 55 60
 Lys Val Phe Leu Ser Gln Val Ile Glu Ser Leu Asp Val Gly Pro Asn
 65 70 75 80
 Ala Thr Arg Val Gly Leu Val Asn Tyr Ala Ser Thr Val Lys Pro Glu
 85 90 95
 Phe Pro Leu Arg Ala His Gly Ser Lys Ala Ser Leu Leu Gln Ala Val
 100 105 110
 Arg Arg Ile Gln Pro Leu Ser Thr Gly Thr Met Thr Gly Leu Ala Leu
 115 120 125
 Gln Phe Ala Ile Thr Lys Ala Leu Ser Asp Ala Glu Gly Gly Arg Ala
 130 135 140
 Arg Ser Pro Asp Ile Ser Lys Val Val Ile Val Val Thr Asp Gly Arg
 145 150 155 160
 Pro Gln Asp Ser Val Arg Asp Val Ser Glu Arg Ala Arg Ala Ser Gly
 165 170 175
 Ile Glu Leu Phe Ala Ile Gly Leu Gly Arg Val Asp Lys Ala Thr Leu
 180 185 190
 Arg Gln Ile Ala Ser Glu Pro Gln Asp Glu His Val Asp Tyr Val Glu
 195 200 205
 Ser Tyr Asn Val Ile Glu Lys Leu Ala Lys Lys Phe Gln Glu Ala Phe
 210 215 220
 Cys Val Val Ser Asp Leu Cys Ala Thr Gly Asp His Asp Cys Glu Gln
 225 230 235 240
 Leu Cys Val Ser Ser Pro Gly Ser Tyr Thr Cys Ala Cys His Glu Gly
 245 250 255

Phe Thr Leu Asn Ser Asp Gly Lys Thr Cys Asn Val Cys Arg Gly Gly
 260 265 270
 Gly Ser Gly Ser Ala Thr Asp Leu Val Phe Leu Ile Asp Gly Ser Lys
 275 280 285
 Ser Val Arg Pro Glu Asn Phe Glu Leu Val Lys Lys Phe Ile Asn Gln
 290 295 300
 Ile Val Asp Thr Leu Asp Val Ser Asp Arg Leu Ala Gln Val Gly Leu
 305 310 315 320
 Val Gln Tyr Ser Ser Ser Ile Arg Gln Glu Phe Pro Leu Gly Arg Phe
 325 330 335
 His Ser Lys Lys Asp Ile Lys Ala Arg Val Arg Asn Met Ser Tyr Met
 340 345 350
 Glu Lys Gly Thr Met Thr Gly Ala Ala Leu Lys Tyr Leu Ile Asp Asn
 355 360 365
 Ser Phe Thr Val Ser Ser Gly Ala Arg Pro Gly Ala Gln Lys Val Gly
 370 375 380
 Ile Val Phe Thr Asp Gly Arg Ser Gln Asp Tyr Ile Asn Asp Ala Ala
 385 390 395 400
 Arg Lys Ala Lys Asp Leu Gly Phe Lys Met Phe Ala Val Gly Val Gly
 405 410 415
 Asn Ala Val Glu Glu Glu Leu Arg Glu Ile Ala Ser Glu Pro Val Ala
 420 425 430
 Asp His Tyr Phe Tyr Thr Ala Asp Phe Lys Thr Ile Asn Gln Ile Gly
 435 440 445
 Lys Lys Leu Gln Lys Gln Ile Cys Val Glu Glu Asp Pro Cys Ala Cys
 450 455 460
 Glu Ser Ile Leu Lys Phe Glu Ala Lys Val Glu Gly Leu Leu Gln Ala
 465 470 475 480
 Leu Thr Arg Lys Leu Glu Ala Val Ser Gly Arg Leu Ala Val Leu Glu
 485 490 495
 Asn Arg Ile Ile
 500

<210> 114
 <211> 416
 <212> PRT
 <213> Gallus gallus

<400> 114
 Val Gly Val Ile Asn Tyr Ala Ser Ala Val Lys Asn Glu Phe Ser Leu

1	5	10	15
Lys Thr His	Gln Thr Lys	Ala Glu Leu Leu	Gln Ala Val Gln Arg Ile
	20	25	30
Glu Pro Leu	Ser Thr Gly	Thr Met Thr Gly	Leu Ala Ile Gln Phe Ala
	35	40	45
Ile Ser Arg	Ala Phe Ser	Asp Thr Glu Gly	Ala Arg Leu Arg Ser Pro
	50	55	60
Asn Ile Asn	Lys Val Ala	Ile Val Val Thr	Asp Gly Arg Pro Gln Asp
	65	70	75
Gly Val Gln	Asp Val Ser	Ala Arg Ala Arg	Gln Ala Gly Ile Glu Ile
	85	90	95
Phe Ala Ile	Gly Val Gly	Arg Val Asp Met	His Thr Leu Arg Gln Ile
	100	105	110
Ala Ser Glu	Pro Leu Asp	Asp His Val Asp	Tyr Val Glu Ser Tyr Ser
	115	120	125
Val Ile Glu	Lys Leu Thr	His Lys Phe Gln	Glu Ala Phe Cys Val Val
	130	135	140
Ser Asp Leu	Cys Ala Thr	Gly Asp His Asp	Cys Glu Gln Ile Cys Ile
	145	150	155
Ser Thr Pro	Gly Ser Tyr	Lys Cys Ala Cys	Lys Glu Gly Phe Thr Leu
	165	170	175
Asn Asn Asp	Gly Lys Thr	Cys Ser Ala Cys	Ser Gly Gly Ser Gly Ser
	180	185	190
Ala Leu Asp	Leu Val Phe	Leu Ile Asp Gly	Ser Lys Ser Val Arg Pro
	195	200	205
Glu Asn Phe	Glu Leu Val	Lys Lys Phe Ile	Asn Gln Ile Val Glu Ser
	210	215	220
Leu Glu Val	Ser Glu Lys	Gln Ala Gln Val	Gly Leu Val Gln Tyr Ser
	225	230	235
Ser Ser Val	Arg Gln Glu	Phe Pro Leu Gly	Gln Phe Lys Asn Lys Lys
	245	250	255
Asp Ile Lys	Ala Ala Val	Lys Lys Met Ala	Tyr Met Glu Lys Gly Thr
	260	265	270
Met Thr Gly	Gln Ala Leu	Lys Tyr Leu Val	Asp Ser Ser Phe Ser Ile
	275	280	285
Ala Asn Gly	Ala Arg Pro	Gly Val Pro Lys	Val Gly Ile Val Phe Thr
	290	295	300
Asp Gly Arg	Ser Gln Asp	Tyr Ile Thr Asp	Ala Ala Lys Lys Ala Lys

305		310		315		320									
Asp	Leu	Gly	Phe	Arg	Met	Phe	Ala	Val	Gly	Val	Gly	Asn	Ala	Val	Glu
				325					330					335	
Asp	Glu	Leu	Arg	Glu	Ile	Ala	Ser	Glu	Pro	Val	Ala	Glu	His	Tyr	Phe
			340					345					350		
Tyr	Thr	Ala	Asp	Phe	Arg	Thr	Ile	Ser	Asn	Ile	Gly	Lys	Lys	Leu	Gln
		355					360					365			
Met	Lys	Ile	Cys	Val	Glu	Glu	Asp	Pro	Cys	Glu	Cys	Lys	Ser	Ile	Val
	370					375					380				
Lys	Phe	Gln	Thr	Lys	Val	Glu	Glu	Leu	Ile	Asn	Thr	Leu	Gln	Gln	Lys
385					390					395					400
Leu	Glu	Ala	Val	Ala	Lys	Arg	Ile	Glu	Ala	Leu	Glu	Asn	Lys	Ile	Ile
			405						410					415	

<210> 115
 <211> 493
 <212> PRT
 <213> Gallus gallus

<400> 115

Met	Asp	Gly	Ile	Phe	Cys	Ala	Leu	Pro	Leu	Ser	Leu	Leu	Leu	Leu	Leu
1				5					10					15	
Gln	Ser	Cys	Gly	Val	Trp	Gly	Ala	Pro	Pro	Gln	Pro	Arg	Gly	Thr	Leu
			20					25					30		
Cys	Arg	Thr	Lys	Pro	Thr	Asp	Leu	Val	Phe	Ile	Ile	Asp	Ser	Ser	Arg
		35					40					45			
Ser	Val	Arg	Pro	Gln	Glu	Phe	Glu	Lys	Val	Lys	Val	Phe	Leu	Ser	Arg
	50					55					60				
Val	Ile	Glu	Gly	Leu	Asp	Val	Gly	Pro	Asn	Ser	Thr	Arg	Val	Gly	Val
65					70					75					80
Ile	Asn	Tyr	Ala	Ser	Ala	Val	Lys	Asn	Glu	Phe	Ser	Leu	Lys	Thr	His
			85						90					95	
Gln	Thr	Lys	Ala	Glu	Leu	Leu	Gln	Ala	Val	Gln	Arg	Ile	Glu	Pro	Leu
			100					105					110		
Ser	Thr	Gly	Thr	Met	Thr	Gly	Leu	Ala	Ile	Gln	Phe	Ala	Ile	Ser	Arg
		115					120					125			
Ala	Phe	Ser	Asp	Thr	Glu	Gly	Ala	Arg	Leu	Arg	Ser	Pro	Asn	Ile	Asn
	130					135					140				

Lys Val Ala Ile Val Val Thr Asp Gly Arg Pro Gln Asp Gly Val Gln
 145 150 155 160
 Asp Val Ser Ala Arg Ala Arg Gln Ala Gly Ile Glu Ile Phe Ala Ile
 165 170 175
 Gly Val Gly Arg Val Asp Met His Thr Leu Arg Gln Ile Ala Ser Glu
 180 185 190
 Pro Leu Asp Asp His Val Asp Tyr Val Glu Ser Tyr Ser Val Ile Glu
 195 200 205
 Lys Leu Thr His Lys Phe Gln Glu Ala Phe Cys Val Val Ser Asp Leu
 210 215 220
 Cys Ala Thr Gly Asp His Asp Cys Glu Gln Ile Cys Ile Ser Thr Pro
 225 230 235 240
 Gly Ser Tyr Lys Cys Ala Cys Lys Glu Gly Phe Thr Leu Asn Asn Asp
 245 250 255
 Gly Lys Thr Cys Ser Ala Cys Ser Gly Gly Ser Gly Ser Ala Leu Asp
 260 265 270
 Leu Val Phe Leu Ile Asp Gly Ser Lys Ser Val Arg Pro Glu Asn Phe
 275 280 285
 Glu Leu Val Lys Lys Phe Ile Asn Gln Ile Val Glu Ser Leu Glu Val
 290 295 300
 Ser Glu Lys Gln Ala Gln Val Gly Leu Val Gln Tyr Ser Ser Ser Val
 305 310 315 320
 Arg Gln Glu Phe Pro Leu Gly Gln Phe Lys Asn Lys Lys Asp Ile Lys
 325 330 335
 Ala Ala Val Lys Lys Met Ala Tyr Met Glu Lys Gly Thr Met Thr Gly
 340 345 350
 Gln Ala Leu Lys Tyr Leu Val Asp Ser Ser Phe Ser Ile Ala Asn Gly
 355 360 365
 Ala Arg Pro Gly Val Pro Lys Val Gly Ile Val Phe Thr Asp Gly Arg
 370 375 380
 Ser Gln Asp Tyr Ile Thr Asp Ala Ala Lys Lys Ala Lys Asp Leu Gly
 385 390 395 400
 Phe Arg Met Phe Ala Val Gly Val Gly Asn Ala Val Glu Asp Glu Leu
 405 410 415
 Arg Glu Ile Ala Ser Glu Pro Val Ala Glu His Tyr Phe Tyr Thr Ala
 420 425 430
 Asp Phe Arg Thr Ile Ser Asn Ile Gly Lys Lys Leu Gln Met Lys Ile
 435 440 445

Cys Val Glu Glu Asp Pro Cys Glu Cys Lys Ser Ile Val Lys Phe Gln
 450 455 460

Thr Lys Val Glu Glu Leu Ile Asn Thr Leu Gln Gln Lys Leu Glu Ala
 465 470 475 480

Val Ala Lys Arg Ile Glu Ala Leu Glu Asn Lys Ile Ile
 485 490

<210> 116
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Gly Met Ser Ser Leu Lys Leu Leu Lys Tyr Val Leu Phe Phe Phe
 1 5 10 15
 Asn Leu Leu Phe Trp Ile Cys Gly Cys Cys Ile Leu Gly Phe Gly Ile
 20 25 30
 Tyr Leu Leu Ile His Asn Asn Phe Gly Val Leu Phe His Asn Leu Pro
 35 40 45
 Ser Leu Thr Leu Gly Asn Val Phe Val Ile Val Gly Ser Ile Ile Met
 50 55 60
 Val Val Ala Phe Leu Gly Cys Met Gly Ser Ile Lys Glu Asn Lys Cys
 65 70 75 80
 Leu Leu Met Ser Phe Phe Ile Leu Leu Leu Ile Ile Leu Leu Ala Glu
 85 90 95
 Val Thr Leu Ala Ile Leu Leu Phe Val Tyr Glu Gln Lys Leu Asn Glu
 100 105 110
 Tyr Val Ala Lys Gly Leu Thr Asp Ser Ile His Arg Tyr His Ser Asp
 115 120 125
 Asn Ser Thr Lys Ala Ala Trp Asp Ser Ile Gln Ser Phe Leu Gln Cys
 130 135 140
 Cys Gly Ile Asn Gly Thr Ser Asp Trp Thr Ser Gly Pro Pro Ala Ser
 145 150 155 160
 Cys Pro Ser Asp Arg Lys Val Glu Gly Cys Tyr Ala Lys Ala Arg Leu
 165 170 175
 Trp Phe His Ser Asn Phe Leu Tyr Ile Gly Ile Ile Thr Ile Cys Val
 180 185 190
 Cys Val Ile Glu Val Leu Gly Met Ser Phe Ala Leu Thr Leu Asn Cys
 195 200 205
 Gln Ile Asp Lys Thr Ser Gln Thr Ile Gly Leu
 210 215

<210> 117
 <211> 219
 <212> PRT
 <213> Rattus norvegicus

<400> 117
 Met Gly Met Ser Ser Leu Lys Leu Leu Lys Tyr Val Leu Phe Phe Phe
 1 5 10 15
 Asn Phe Leu Phe Trp Val Cys Gly Cys Cys Ile Leu Gly Phe Gly Ile
 20 25 30
 His Leu Leu Val Gln Asn Thr Tyr Gly Ile Leu Phe Arg Asn Leu Pro
 35 40 45
 Phe Leu Thr Leu Gly Asn Val Leu Val Ile Val Gly Ser Ile Ile Met
 50 55 60
 Val Val Ala Phe Leu Gly Cys Met Gly Ser Ile Lys Glu Asn Lys Cys
 65 70 75 80
 Leu Leu Met Ser Phe Phe Val Leu Leu Leu Leu Ile Leu Leu Ala Glu
 85 90 95
 Val Thr Leu Ala Ile Leu Leu Phe Val Tyr Glu Lys Lys Ile Asn Thr
 100 105 110
 Leu Val Ala Glu Gly Leu Asn Asp Ser Ile Gln His Tyr His Ser Asp
 115 120 125
 Asn Ser Thr Arg Met Ala Trp Asp Phe Ile Gln Ser Gln Leu Gln Cys
 130 135 140
 Cys Gly Val Asn Gly Ser Ser Asp Trp Ile Ser Gly Pro Pro Ser Ser
 145 150 155 160
 Cys Pro Ser Gly Ala Asp Val Gln Gly Cys Tyr Lys Lys Gly Gln Ala
 165 170 175
 Trp Phe His Ser Asn Phe Leu Tyr Ile Gly Ile Val Thr Ile Cys Val
 180 185 190
 Cys Val Ile Gln Val Leu Gly Met Ser Phe Ala Leu Thr Leu Asn Cys
 195 200 205
 Gln Ile Asp Lys Thr Ser Gln Ala Leu Gly Leu
 210 215

<210> 118
 <211> 219
 <212> PRT
 <213> Mus musculus

<400> 118

Met Gly Met Ser Ser Leu Lys Leu Leu Lys Tyr Val Leu Phe Ile Phe
 1 5 10 15
 Asn Leu Leu Phe Trp Val Cys Gly Cys Cys Ile Leu Gly Phe Gly Ile
 20 25 30
 Tyr Phe Leu Val Gln Asn Thr Tyr Gly Val Leu Phe Arg Asn Leu Pro
 35 40 45
 Phe Leu Thr Leu Gly Asn Ile Leu Val Ile Val Gly Ser Ile Ile Met
 50 55 60
 Val Val Ala Phe Leu Gly Cys Met Gly Ser Ile Lys Glu Asn Lys Cys
 65 70 75 80
 Leu Leu Met Ser Phe Phe Val Leu Leu Leu Ile Ile Leu Leu Ala Glu
 85 90 95
 Val Thr Ile Ala Ile Leu Leu Phe Val Tyr Glu Gln Lys Leu Asn Thr
 100 105 110
 Leu Val Ala Glu Gly Leu Asn Asp Ser Ile Gln His Tyr His Ser Asp
 115 120 125
 Asn Ser Thr Met Lys Ala Trp Asp Phe Ile Gln Thr Gln Leu Gln Cys
 130 135 140
 Cys Gly Val Asn Gly Ser Ser Asp Trp Thr Ser Gly Pro Pro Ser Ser
 145 150 155 160
 Cys Pro Ser Gly Ala Asp Val Gln Gly Cys Tyr Asn Lys Ala Lys Ser
 165 170 175
 Trp Phe His Ser Asn Phe Leu Tyr Ile Gly Ile Ile Thr Ile Cys Val
 180 185 190
 Cys Val Ile Gln Val Leu Gly Met Ser Phe Ala Leu Thr Leu Asn Cys
 195 200 205
 Gln Ile Asp Lys Thr Ser Gln Ala Leu Gly Leu
 210 215

<210> 119
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 119
 Met Ala Arg Gly Cys Leu Cys Cys Leu Lys Tyr Met Met Phe Leu Phe
 1 5 10 15
 Asn Leu Ile Phe Trp Leu Cys Gly Cys Gly Leu Leu Gly Val Gly Ile
 20 25 30
 Trp Leu Ser Val Ser Gln Gly Asn Phe Ala Thr Phe Ser Pro Ser Phe
 35 40 45

Pro Ser Leu Ser Ala Ala Asn Leu Val Ile Ala Ile Gly Thr Ile Val
 50 55 60
 Met Val Thr Gly Phe Leu Gly Cys Leu Gly Ala Ile Lys Glu Asn Lys
 65 70 75 80
 Cys Leu Leu Leu Ser Phe Phe Ile Val Leu Leu Val Ile Leu Leu Ala
 85 90 95
 Glu Leu Ile Leu Leu Ile Leu Phe Phe Val Tyr Met Asp Lys Val Asn
 100 105 110
 Glu Asn Ala Lys Lys Asp Leu Lys Glu Gly Leu Leu Leu Tyr His Thr
 115 120 125
 Glu Asn Asn Val Gly Leu Lys Asn Ala Trp Asn Ile Ile Gln Ala Glu
 130 135 140
 Met Arg Cys Cys Gly Val Thr Asp Tyr Thr Asp Trp Tyr Pro Val Leu
 145 150 155 160
 Gly Glu Asn Thr Val Pro Asp Arg Cys Cys Met Glu Asn Ser Gln Gly
 165 170 175
 Cys Gly Arg Asn Ala Thr Thr Pro Leu Trp Arg Thr Gly Cys Tyr Glu
 180 185 190
 Lys Val Lys Met Trp Phe Asp Asp Asn Lys His Val Leu Gly Thr Val
 195 200 205
 Gly Met Cys Ile Leu Ile Met Gln Ile Leu Gly Met Ala Phe Ser Met
 210 215 220
 Thr Leu Phe Gln His Ile His Arg Thr Gly Lys Lys Tyr Asp Ala
 225 230 235

<210> 120
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 120
 Met Val Thr Gly Phe Leu Gly Cys Leu Gly Ala Ile Lys Glu Asn Lys
 1 5 10 15
 Cys Leu Leu Leu Ser Phe Phe Ile Val Leu Leu Val Ile Leu Leu Ala
 20 25 30
 Glu Leu Ile Leu Leu Ile Leu Phe Phe Val Tyr Met Asp Lys Val Asn
 35 40 45
 Glu Asn Ala Lys Lys Asp Leu Lys Glu Gly Leu Leu Leu Tyr His Thr
 50 55 60
 Glu Asn Asn Val Gly Leu Lys Asn Ala Trp Asn Ile Ile Gln Ala Glu

65		70		75		80									
Met	Arg	Cys	Cys	Gly	Val	Thr	Asp	Tyr	Thr	Asp	Trp	Tyr	Pro	Val	Leu
				85					90					95	
Gly	Glu	Asn	Thr	Val	Pro	Asp	Arg	Cys	Cys	Met	Glu	Asn	Ser	Gln	Gly
			100					105					110		
Cys	Gly	Arg	Asn	Ala	Thr	Thr	Pro	Leu	Trp	Arg	Thr	Gly	Cys	Tyr	Glu
		115					120					125			
Lys	Val	Lys	Met	Trp	Phe	Asp	Asp	Asn	Lys	His	Val	Leu	Gly	Thr	Val
	130					135					140				
Gly	Met	Cys	Ile	Leu	Ile	Met	Gln	Ile	Leu	Gly	Met	Ala	Phe	Ser	Met
145					150					155					160
Thr	Leu	Phe	Gln	His	Ile	His	Arg	Thr	Gly	Lys	Lys	Tyr	Asp	Ala	
			165						170					175	

<210> 121
 <211> 488
 <212> PRT
 <213> Homo sapiens

<400> 121
Met Glu Pro Phe Leu Arg Arg Arg Leu Ala Phe Leu Ser Phe Phe Trp
1 5 10 15
Asp Lys Ile Trp Pro Ala Gly Gly Glu Pro Asp His Gly Thr Pro Gly
20 25 30
Ser Leu Asp Pro Asn Thr Asp Pro Val Pro Thr Leu Pro Ala Glu Pro
35 40 45
Cys Ser Pro Phe Pro Gln Leu Phe Leu Ala Leu Tyr Asp Phe Thr Ala
50 55 60
Arg Cys Gly Gly Glu Leu Ser Val Arg Arg Gly Asp Arg Leu Cys Ala
65 70 75 80
Leu Glu Glu Gly Gly Gly Tyr Ile Phe Ala Arg Arg Leu Ser Gly Gln
85 90 95
Pro Ser Ala Gly Leu Val Pro Ile Thr His Val Ala Lys Ala Ser Pro
100 105 110
Glu Thr Leu Ser Asp Gln Pro Trp Tyr Phe Ser Gly Val Ser Arg Thr
115 120 125
Gln Ala Gln Gln Leu Leu Leu Ser Pro Pro Asn Glu Pro Gly Ala Phe
130 135 140
Leu Ile Arg Pro Ser Glu Ser Ser Leu Gly Gly Tyr Ser Leu Ser Val
145 150 155 160

Arg Ala Gln Ala Lys Val Cys His Tyr Arg Val Ser Met Ala Ala Asp
 165 170 175
 Gly Ser Leu Tyr Leu Gln Lys Gly Arg Leu Phe Pro Gly Leu Glu Glu
 180 185 190
 Leu Leu Thr Tyr Tyr Lys Ala Asn Trp Lys Leu Ile Gln Asn Pro Leu
 195 200 205
 Leu Gln Pro Cys Met Pro Gln Lys Ala Pro Arg Gln Asp Val Trp Glu
 210 215 220
 Arg Pro His Ser Glu Phe Ala Leu Gly Arg Lys Leu Gly Glu Gly Tyr
 225 230 235 240
 Phe Gly Glu Val Trp Glu Gly Leu Trp Leu Gly Ser Leu Pro Val Ala
 245 250 255
 Ile Lys Val Ile Lys Ser Ala Asn Met Lys Leu Thr Asp Leu Ala Lys
 260 265 270
 Glu Ile Gln Thr Leu Lys Gly Leu Arg His Glu Arg Leu Ile Arg Leu
 275 280 285
 His Ala Val Cys Ser Gly Gly Glu Pro Val Tyr Ile Val Thr Glu Leu
 290 295 300
 Met Arg Lys Gly Asn Leu Gln Ala Phe Leu Gly Thr Pro Glu Gly Arg
 305 310 315 320
 Ala Leu Arg Leu Pro Pro Leu Leu Gly Phe Ala Cys Gln Val Ala Glu
 325 330 335
 Gly Met Ser Tyr Leu Glu Glu Gln Arg Val Val His Arg Asp Leu Ala
 340 345 350
 Ala Arg Asn Val Leu Val Asp Asp Gly Leu Ala Cys Lys Val Ala Asp
 355 360 365
 Phe Gly Leu Ala Arg Leu Leu Lys Asp Asp Ile Tyr Ser Pro Ser Ser
 370 375 380
 Ser Ser Lys Ile Pro Val Lys Trp Thr Ala Pro Glu Ala Ala Asn Tyr
 385 390 395 400
 Arg Val Phe Ser Gln Lys Ser Asp Val Trp Ser Phe Gly Val Leu Leu
 405 410 415
 His Glu Val Phe Thr Tyr Gly Gln Cys Pro Tyr Glu Gly Met Thr Asn
 420 425 430
 His Glu Thr Leu Gln Gln Ile Met Arg Gly Tyr Arg Leu Pro Arg Pro
 435 440 445
 Ala Ala Cys Pro Ala Glu Val Tyr Val Leu Met Leu Glu Cys Trp Arg
 450 455 460

Ser Ser Pro Glu Glu Arg Pro Ser Phe Ala Thr Leu Arg Glu Lys Leu
 465 470 475 480

His Ala Ile His Arg Cys His Pro
 485

<210> 122
 <211> 496
 <212> PRT
 <213> Mus musculus

<400> 122
 Met Glu Pro Phe Leu Arg Lys Arg Leu Thr Phe Leu Ser Phe Phe Trp
 1 5 10 15
 Asp Lys Ile Trp Pro Ala Asp Glu Ser Glu Glu Asp Ile Pro Arg Ile
 20 25 30
 Gln Gly His Asp Asp Asn Pro Val Pro Glu Gln Ala Ala Ala Val Glu
 35 40 45
 Pro Cys Ser Phe Pro Ala Pro Arg Ala Arg Leu Phe Arg Ala Leu Tyr
 50 55 60
 Asp Phe Thr Ala Arg Cys Ala Glu Glu Leu Ser Val Ser Arg Gly Asp
 65 70 75 80
 Arg Leu Tyr Ala Leu Lys Glu Glu Gly Asp Tyr Ile Phe Ala Gln Arg
 85 90 95
 Leu Ser Gly Pro Pro Ser Thr Gly Leu Val Pro Val Thr Tyr Leu Ala
 100 105 110
 Lys Ala Thr Pro Glu Pro Pro Ser Asp Gln Pro Trp Tyr Phe Ser Gly
 115 120 125
 Ile Ser Arg Ala Gln Ala Gln Gln Leu Leu Leu Ser Pro Ala Asn Ala
 130 135 140
 Pro Gly Ala Phe Leu Ile Arg Pro Ser Glu Ser Ser Ile Gly Gly Tyr
 145 150 155 160
 Ser Leu Ser Val Arg Ala Gln Ala Lys Val Cys His Tyr Arg Ile Cys
 165 170 175
 Met Ala Pro Ser Gly Ser Leu Tyr Leu Gln Glu Gly Gln Leu Phe Pro
 180 185 190
 Ser Leu Asp Ala Leu Leu Ala Tyr Tyr Lys Thr Asn Trp Lys Leu Ile
 195 200 205
 Gln Asn Pro Leu Leu Gln Pro Cys Ile Pro Gln Ile Pro Leu Val Gln
 210 215 220
 Asp Glu Trp Glu Arg Pro Arg Ser Glu Phe Val Leu Arg Arg Lys Leu
 225 230 235 240

Gly	Glu	Gly	Phe	Phe	Gly	Glu	Val	Trp	Glu	Gly	Leu	Trp	Leu	Gly	Ser	
				245					250					255		
Ile	Pro	Val	Ala	Val	Lys	Val	Ile	Lys	Ser	Ala	Asp	Met	Lys	Leu	Ala	
			260					265					270			
Asp	Leu	Thr	Lys	Glu	Ile	Glu	Ala	Leu	Lys	Ser	Leu	Arg	His	Glu	Arg	
		275					280					285				
Leu	Ile	Arg	Leu	His	Ala	Ile	Cys	Ser	Leu	Gly	Glu	Pro	Val	Tyr	Ile	
	290					295					300					
Val	Thr	Glu	Leu	Met	Gly	Lys	Gly	Asn	Leu	Gln	Val	Tyr	Leu	Gly	Ser	
305					310					315					320	
Ser	Glu	Gly	Lys	Ala	Leu	Ser	Leu	Pro	His	Leu	Leu	Gly	Phe	Ala	Cys	
				325					330					335		
Gln	Val	Ala	Glu	Gly	Met	Ser	Tyr	Leu	Glu	Glu	Arg	Arg	Val	Val	His	
			340					345					350			
Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val	Gly	Asp	Asp	Leu	Thr	Cys	
		355					360					365				
Lys	Val	Ala	Asp	Phe	Gly	Leu	Ala	Arg	Leu	Leu	Lys	Asp	Asp	Val	Tyr	
	370					375					380					
Ser	Pro	Ser	Ser	Gly	Ser	Lys	Ile	Pro	Val	Lys	Trp	Thr	Ala	Pro	Glu	
385					390					395					400	
Ala	Ala	Asn	Tyr	Arg	Val	Phe	Ser	Gln	Lys	Ser	Asp	Val	Trp	Ser	Phe	
				405					410					415		
Gly	Ile	Leu	Leu	Tyr	Glu	Val	Phe	Thr	Tyr	Gly	Gln	Cys	Pro	Tyr	Glu	
		420						425					430			
Gly	Met	Thr	Asn	His	Glu	Thr	Leu	Gln	Gln	Ile	Ser	Arg	Gly	Tyr	Arg	
		435					440					445				
Leu	Pro	Arg	Pro	Ala	Val	Cys	Pro	Ala	Glu	Val	Tyr	Val	Leu	Met	Val	
	450					455					460					
Glu	Cys	Trp	Lys	Gly	Ser	Pro	Glu	Glu	Arg	Pro	Thr	Phe	Ala	Ile	Leu	
465					470					475					480	
Arg	Glu	Lys	Leu	Asn	Ala	Ile	Asn	Arg	Arg	Leu	His	Leu	Gly	Leu	Thr	
				485				490					495			

<210> 123
 <211> 496
 <212> PRT
 <213> Mus musculus

<400> 123

Met	Glu	Pro	Phe	Leu	Arg	Lys	Arg	Leu	Thr	Phe	Leu	Ser	Phe	Phe	Trp
1				5					10					15	
Asp	Lys	Ile	Trp	Pro	Ala	Asp	Glu	Ser	Glu	Glu	Asp	Ile	Pro	Arg	Ile
			20					25					30		
Gln	Gly	His	Asp	Asp	Asn	Pro	Val	Pro	Glu	Gln	Ala	Ala	Ala	Val	Glu
		35					40					45			
Pro	Cys	Ser	Phe	Pro	Ala	Pro	Arg	Ala	Arg	Leu	Phe	Arg	Ala	Leu	Tyr
	50					55					60				
Asp	Phe	Thr	Ala	Arg	Cys	Ala	Glu	Glu	Leu	Ser	Val	Ser	Gly	Gly	Asp
65					70					75					80
Arg	Leu	Tyr	Ala	Leu	Lys	Glu	Glu	Gly	Asp	Tyr	Ile	Phe	Ala	Gln	Arg
				85					90					95	
Leu	Ser	Gly	Pro	Pro	Ser	Thr	Gly	Leu	Val	Pro	Val	Thr	Tyr	Leu	Ala
			100					105					110		
Lys	Ala	Thr	Pro	Glu	Pro	Pro	Ser	Asp	Gln	Pro	Trp	Tyr	Phe	Ser	Gly
		115					120					125			
Ile	Ser	Arg	Ala	Gln	Ala	Gln	Gln	Leu	Leu	Leu	Ser	Pro	Ala	Asn	Ala
	130					135					140				
Pro	Gly	Ala	Phe	Leu	Ile	Arg	Pro	Ser	Glu	Ser	Ser	Ile	Gly	Gly	Tyr
145					150					155					160
Ser	Leu	Ser	Val	Arg	Ala	Gln	Ala	Lys	Val	Cys	His	Tyr	Arg	Ile	Cys
				165					170					175	
Met	Ala	Pro	Ser	Gly	Ser	Leu	Tyr	Leu	Gln	Glu	Gly	Gln	Leu	Phe	Pro
			180					185					190		
Ser	Leu	Asp	Ala	Leu	Leu	Ala	Tyr	Tyr	Lys	Thr	Asn	Trp	Lys	Leu	Ile
		195					200					205			
Gln	Asn	Pro	Leu	Leu	Gln	Pro	Cys	Ile	Pro	Gln	Ile	Pro	Leu	Val	Gln
	210					215					220				
Asp	Glu	Trp	Glu	Arg	Pro	Arg	Ser	Glu	Phe	Val	Phe	Gly	Arg	Lys	Leu
225					230					235					240
Gly	Glu	Gly	Phe	Phe	Gly	Glu	Val	Trp	Glu	Gly	Leu	Trp	Leu	Gly	Ser
			245						250					255	
Ile	Pro	Val	Ala	Val	Lys	Val	Ile	Lys	Ser	Ala	Asp	Met	Lys	Leu	Ala
			260					265					270		
Asp	Leu	Thr	Lys	Glu	Ile	Glu	Ala	Leu	Lys	Ser	Leu	Arg	His	Glu	Arg
		275					280					285			
Leu	Ile	Arg	Leu	His	Ala	Ile	Cys	Ser	Leu	Gly	Glu	Pro	Val	Tyr	Ile

290	295	300
Val Thr Glu Leu Met Gly Lys Gly Asn Leu Gln Val Tyr Leu Gly Ser 305 310 315 320		
Ser Glu Gly Lys Ala Leu Ser Leu Pro His Leu Leu Gly Phe Ala Cys 325 330 335		
Gln Val Ala Glu Gly Met Ser Tyr Leu Glu Glu Arg Arg Val Val His 340 345 350		
Arg Asp Leu Ala Ala Arg Asn Val Leu Val Gly Asp Asp Leu Thr Cys 355 360 365		
Lys Val Ala Asp Phe Gly Leu Ala Arg Leu Leu Lys Asp Asp Val Tyr 370 375 380		
Ser Pro Ser Ser Gly Ser Lys Ile Pro Val Lys Trp Thr Ala Pro Glu 385 390 395 400		
Ala Ala Asn Tyr Arg Val Phe Ser Gln Lys Ser Asp Val Trp Ser Phe 405 410 415		
Gly Ile Leu Leu Tyr Glu Val Phe Thr Tyr Gly Gln Cys Pro Tyr Glu 420 425 430		
Gly Met Thr Asn His Glu Thr Leu Gln Gln Ile Ser Arg Gly Tyr Arg 435 440 445		
Leu Pro Arg Pro Ala Val Cys Pro Ala Glu Val Tyr Val Leu Met Val 450 455 460		
Glu Cys Trp Lys Gly Ser Pro Glu Glu Arg Pro Thr Phe Ala Ile Leu 465 470 475 480		
Arg Glu Lys Leu Asn Ala Ile Asn Arg Arg Leu His Leu Gly Leu Thr 485 490 495		

<210> 124
 <211> 496
 <212> PRT
 <213> Mus musculus

<400> 124
 Met Glu Pro Phe Leu Arg Lys Arg Leu Thr Phe Leu Ser Phe Phe Trp
 1 5 10 15
 Asp Lys Ile Trp Pro Ala Asp Glu Ser Glu Glu Asp Ile Pro Arg Ile
 20 25 30
 Gln Gly His Asp Asp Asn Pro Val Pro Glu Gln Ala Ala Ala Val Glu
 35 40 45

Pro Cys Ser Phe Pro Ala Pro Arg Ala Arg Leu Phe Arg Ala Leu Tyr
 50 55 60
 Asp Phe Thr Ala Arg Cys Ala Glu Glu Leu Ser Val Ser Arg Gly Asp
 65 70 75 80
 Arg Leu Tyr Ala Leu Lys Glu Glu Gly Asp Tyr Ile Phe Ala Gln Arg
 85 90 95
 Leu Ser Gly Pro Pro Ser Thr Gly Leu Val Pro Val Thr Tyr Leu Ala
 100 105 110
 Lys Ala Thr Pro Glu Pro Pro Ser Asp Gln Pro Trp Tyr Phe Ser Gly
 115 120 125
 Ile Ser Arg Ala Gln Ala Gln Gln Leu Leu Leu Ser Pro Ala Asn Ala
 130 135 140
 Pro Gly Ala Phe Leu Ile Arg Pro Ser Glu Ser Ser Ile Gly Gly Tyr
 145 150 155 160
 Ser Leu Ser Val Arg Ala Gln Ala Lys Val Cys His Tyr Arg Ile Cys
 165 170 175
 Met Ala Pro Ser Gly Ser Leu Tyr Leu Gln Glu Gly Gln Leu Phe Pro
 180 185 190
 Ser Leu Asp Ala Leu Leu Ala Tyr Tyr Lys Thr Asn Trp Lys Leu Ile
 195 200 205
 Gln Asn Pro Leu Leu Gln Pro Cys Ile Pro Gln Ile Pro Leu Val Gln
 210 215 220
 Asp Glu Trp Glu Arg Pro Arg Ser Glu Phe Val Leu Arg Lys Lys Leu
 225 230 235 240
 Gly Glu Gly Phe Phe Gly Glu Val Trp Glu Gly Leu Trp Leu Gly Ser
 245 250 255
 Ile Pro Val Ala Val Lys Val Ile Lys Ser Ala Asp Met Lys Leu Ala
 260 265 270
 Asp Leu Thr Lys Glu Asn Glu Ala Leu Lys Ser Leu Arg His Glu Arg
 275 280 285
 Leu Ile Arg Leu His Ala Ile Cys Ser Leu Gly Glu Pro Val Tyr Ile
 290 295 300
 Val Thr Glu Leu Met Gly Lys Gly Asn Leu Gln Val Tyr Leu Gly Ser
 305 310 315 320
 Ser Glu Gly Lys Ala Leu Ser Leu Pro His Leu Leu Gly Phe Ala Cys
 325 330 335
 Gln Val Ala Glu Gly Met Ser Tyr Leu Glu Glu Arg Arg Val Val His
 340 345 350

Arg Asp Leu Ala Ala Arg Asn Val Leu Val Gly Asp Asp Leu Thr Cys
 355 360 365
 Lys Val Ala Asp Phe Gly Leu Ala Arg Leu Leu Lys Asp Asp Val Tyr
 370 375 380
 Ser Pro Ser Ser Gly Ser Lys Ile Pro Val Lys Trp Thr Ala Pro Glu
 385 390 395 400
 Ala Ala Asn Tyr Arg Val Phe Ser Gln Lys Ser Asp Val Trp Ser Phe
 405 410 415
 Gly Ile Leu Leu Tyr Glu Val Phe Thr Tyr Gly Gln Cys Pro Tyr Glu
 420 425 430
 Gly Met Thr Asn His Glu Thr Leu Gln Gln Ile Ser Arg Gly Tyr Arg
 435 440 445
 Leu Pro Arg Pro Ala Val Cys Pro Ala Glu Val Tyr Val Leu Met Val
 450 455 460
 Glu Cys Trp Lys Gly Ser Pro Glu Glu Arg Pro Thr Phe Ala Ile Leu
 465 470 475 480
 Arg Glu Lys Leu Asn Ala Ile Asn Arg Arg Leu His Leu Gly Leu Thr
 485 490 495

<210> 125
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 125
 Met Val Ser Arg Asp Gln Ala His Leu Gly Pro Lys Tyr Val Gly Leu
 1 5 10 15
 Trp Asp Phe Lys Ser Arg Thr Asp Glu Glu Leu Ser Phe Arg Ala Gly
 20 25 30
 Asp Val Phe His Val Ala Arg Lys Glu Glu Gln Trp Trp Trp Ala Thr
 35 40 45
 Leu Leu Asp Glu Ala Gly Gly Ala Val Ala Gln Gly Tyr Val Pro His
 50 55 60
 Asn Tyr Leu Ala Glu Arg Glu Thr Val Glu Ser Glu Pro Trp Phe Phe
 65 70 75 80
 Gly Cys Ile Ser Arg Ser Glu Ala Val Arg Arg Leu Gln Ala Glu Gly
 85 90 95
 Asn Ala Thr Gly Ala Phe Leu Ile Arg Val Ser Glu Lys Pro Ser Ala
 100 105 110

Asp Tyr Val Leu Ser Val Arg Asp Thr Gln Ala Val Arg His Tyr Lys
 115 120 125
 Ile Trp Arg Arg Ala Gly Gly Arg Leu His Leu Asn Glu Ala Val Ser
 130 135 140
 Phe Leu Ser Leu Pro Glu Leu Val Asn Tyr His Arg Ala Gln Ser Leu
 145 150 155 160
 Ser His Gly Leu Arg Leu Ala Ala Pro Cys Arg Lys His Glu Pro Glu
 165 170 175
 Pro Leu Pro His Trp Asp Asp Trp Glu Arg Pro Arg Glu Glu Phe Thr
 180 185 190
 Leu Cys Arg Lys Leu Gly Ser Gly Tyr Phe Gly Glu Val Phe Glu Gly
 195 200 205
 Leu Trp Lys Asp Arg Val Gln Val Ala Ile Lys Val Ile Ser Arg Asp
 210 215 220
 Asn Leu Leu His Gln Gln Met Leu Gln Ser Glu Ile Gln Ala Met Lys
 225 230 235 240
 Lys Leu Arg His Lys His Ile Leu Ala Leu Tyr Ala Val Val Ser Val
 245 250 255
 Gly Asp Pro Val Tyr Ile Ile Thr Glu Leu Met Ala Lys Gly Ser Leu
 260 265 270
 Leu Glu Leu Leu Arg Asp Ser Asp Glu Lys Val Leu Pro Val Ser Glu
 275 280 285
 Leu Leu Asp Ile Ala Trp Gln Val Ala Glu Gly Met Cys Tyr Leu Glu
 290 295 300
 Ser Gln Asn Tyr Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val
 305 310 315 320
 Gly Glu Asn Thr Leu Cys Lys Val Gly Asp Phe Gly Leu Ala Arg Leu
 325 330 335
 Ile Lys Glu Asp Val Tyr Leu Ser His Asp His Asn Ile Pro Tyr Lys
 340 345 350
 Trp Thr Ala Pro Glu Ala Leu Ser Arg Gly His Tyr Ser Thr Lys Ser
 355 360 365
 Asp Val Trp Ser Phe Gly Ile Leu Leu His Glu Met Phe Ser Arg Gly
 370 375 380
 Gln Val Pro Tyr Pro Gly Met Ser Asn His Glu Ala Phe Leu Arg Val
 385 390 395 400
 Asp Ala Gly Tyr Arg Met Pro Cys Pro Leu Glu Cys Pro Pro Ser Val
 405 410 415

His Lys Leu Met Leu Thr Cys Trp Cys Arg Asp Pro Glu Gln Arg Pro
 420 425 430

Cys Phe Lys Ala Leu Arg Glu Arg Leu Ser Ser Phe Thr Ser Tyr Glu
 435 440 445

Asn Pro Thr
 450

<210> 126

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:consensus
 sequence

<400> 126

Gly Gln Asp Leu Leu Gln Val Phe Asp Leu Pro Glu Ser Ser Phe Ser
 1 5 10 15

Val Arg Lys Gly Val Gly Leu His Gly Ser Ser Pro Ala Tyr Arg Phe
 20 25 30

Gly Lys Pro Ala Val Val Ser Gln Pro Thr Arg Thr Leu Phe Pro Ser
 35 40 45

Gly Leu Pro Glu Asp Phe Ser Leu Leu Thr Thr Phe Arg Gln Ala Pro
 50 55 60

Lys Ser Arg Gly Val Leu Phe Ala Ile Tyr Asp Ala Gln Asn Val Arg
 65 70 75 80

Gln Leu Gly Leu Glu Val Asn Gly Arg Ala Asn Thr Leu Leu Leu Arg
 85 90 95

Tyr Gln Gly Val Asp Gly Lys Gln His Thr Val Ser Phe Arg Asn Leu
 100 105 110

Pro Leu Ala Asp Gly Gln Trp His Lys Leu Ala Leu Ser Val Ser Gly
 115 120 125

Glu Ser Ala Thr Leu Tyr Val Asp Cys Asn Glu Ile Asp Ser Arg Pro
 130 135 140

Leu Asp Arg Pro Phe Pro Pro Ile Asp Thr Asp Gly Ile Glu Val Arg
 145 150 155 160

Gly Ala Gln Ala Ala Asp Glu Lys Lys Phe Gln Gly Asp Leu
 165 170

<210> 127

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide
primer

<400> 127

gtgaaagggt gctatgcaaa

20